Guide for RF Microwave Coaxial Switches

COAXIAL SWITCH

RF & Microwave

CONTENTS

SWITCH DEFINITIONS AND TERMS

NC:

In the power off or no control signal mode, the swith is connected to the single pole by default.

NO:

In the power off or no control signal mode, the switch is disconnected by default.

SPDT:

Single pole, two position type, only one position is connected to the pole and the unselected position is in an open-circuit state or a terminated state.

SPnT:

Single pole, Multi-position type, only one position is connected to the pole and the unselected position is in an open-circuit state of a terminated state.

DPDT:

Four pole, non position, two-way switching can be realized when working.

Latching:

In the Latching mode, the switch will remain in any switched position when it is being switched mormally unitl the next effective control signal is triggered, which is suitable for maintaining a condition without power supply for a long time, thereby reducing the heat generated by the device itself.

Failsafe/Normally open:

In the failsafe mode, which is standard on db switches, the switch will return to the open position when voltage is removed or loss control.

Normally open mode:

The basic switch mode, in the factory or reset mode, the RF end is fully reflected.

Terminated:

Position disconnected to the pole automatically match standard terminated.

Indicators:

It is an internal SpnT switch that corresponds to each position and the indicator is triggered by the RF touch point it represents, so as to feedback the status of the switch, which is used to confirm that the system is working properly and display the current position of the switch.

TTL control circuit:

Users can apply a set of rated power voltage across a pair of designated power terminals, this power can accommodate TTL voltage controlled switches.

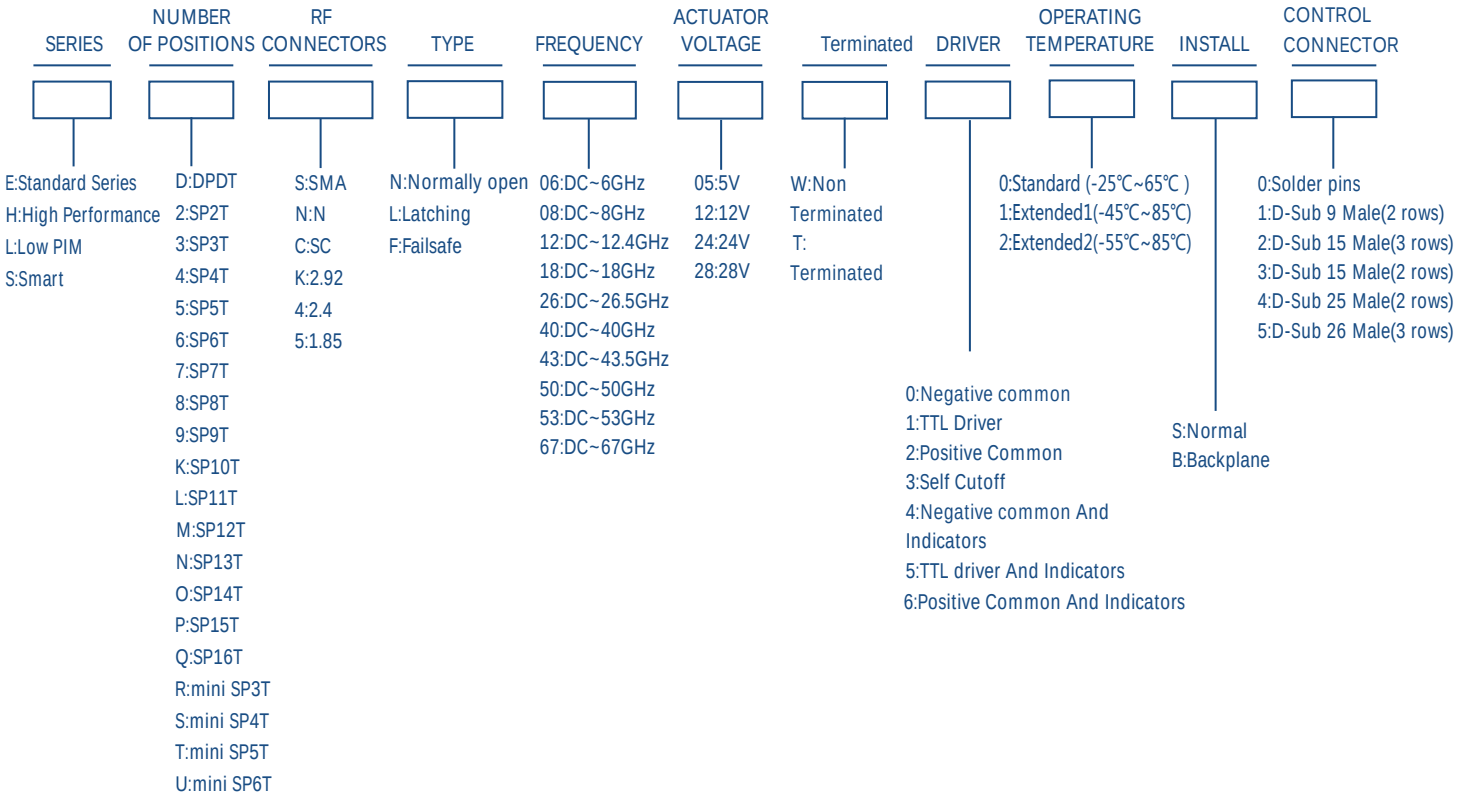
Cold Switching:

When the power is greater than 1W, the power is disconnected before the switch is switched.

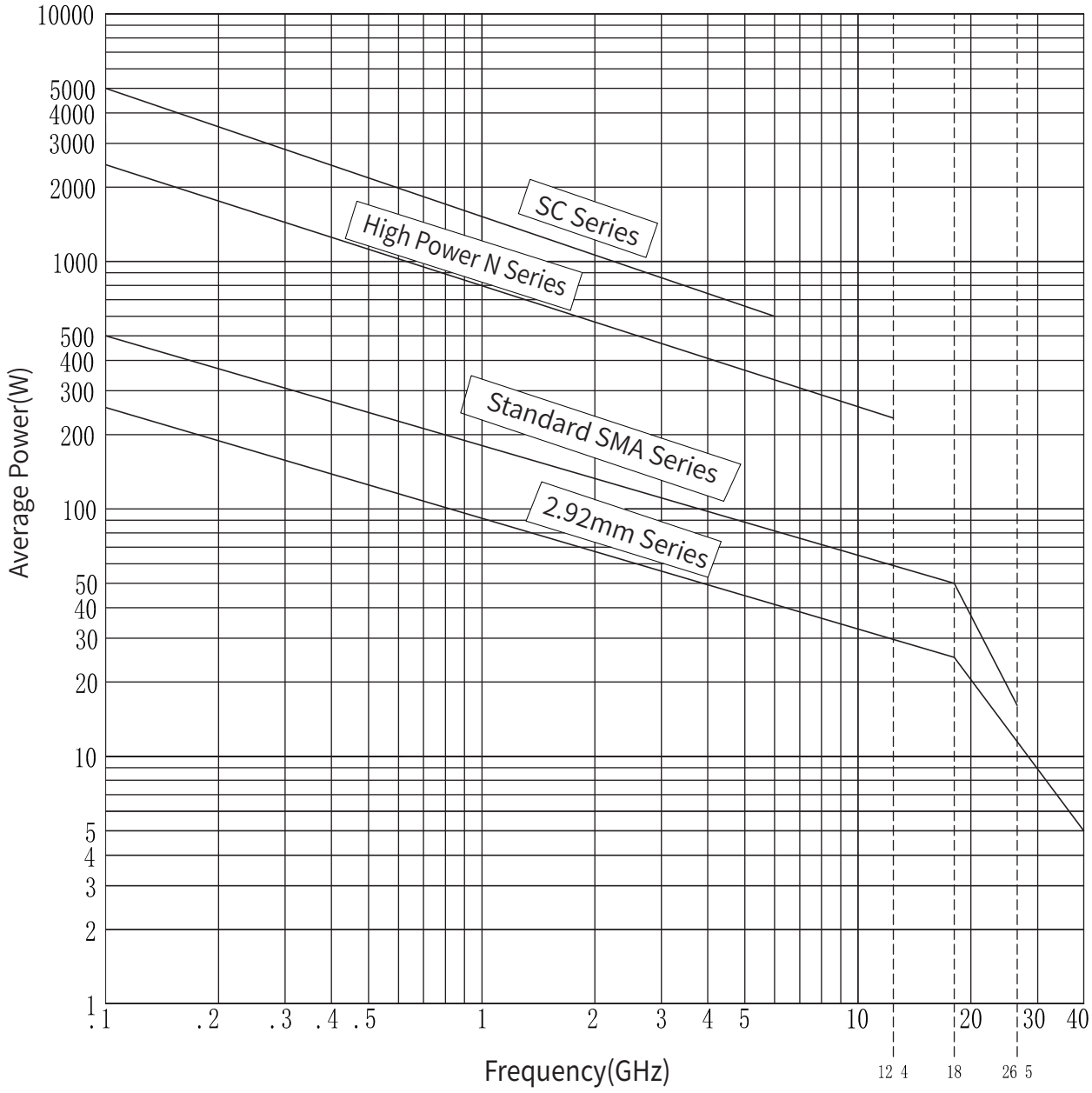
Hot Switching:

When the rated power is less than 1W, it can be switched with termination.

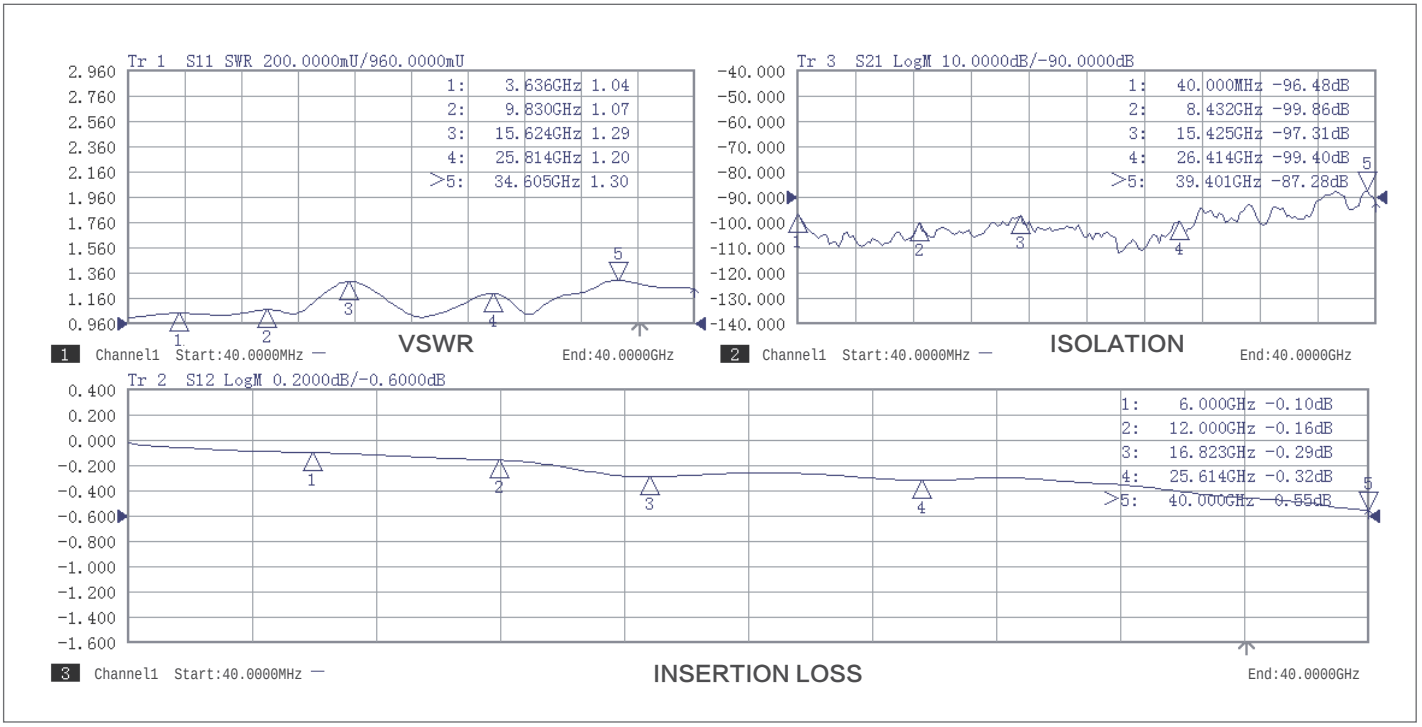
SWITCH
SELECT MODEL



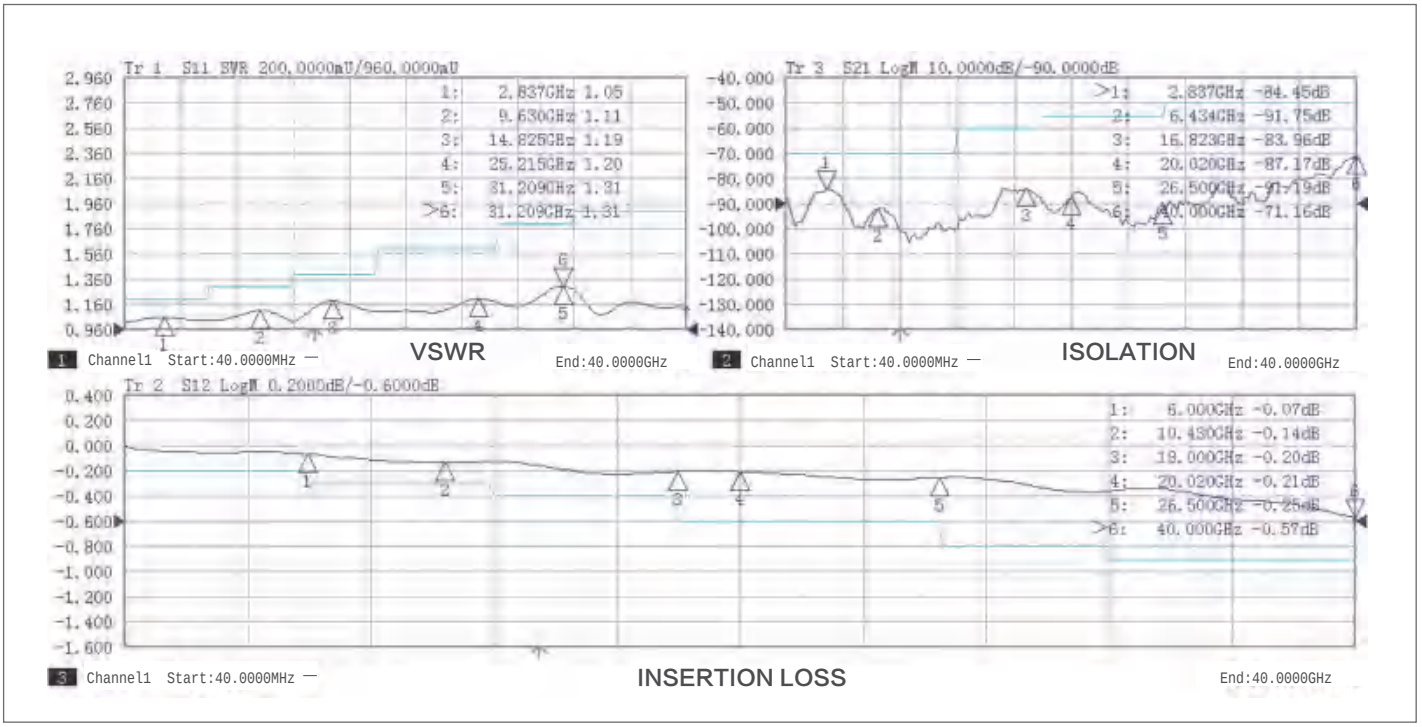
Power Map


Average Power(W)
10000
5000
4000
3000
2000
1000
500
400
300
200
100
50
40
30
20
10
5
4
3
2
1
.1
.2
.3
.4
.5
1
2
3
4
5
10
20
30
40
Frequency(GHz)
12.4
18
26.5
SC Series
High Power N Series
Standard SMA Series
2.92mm Series

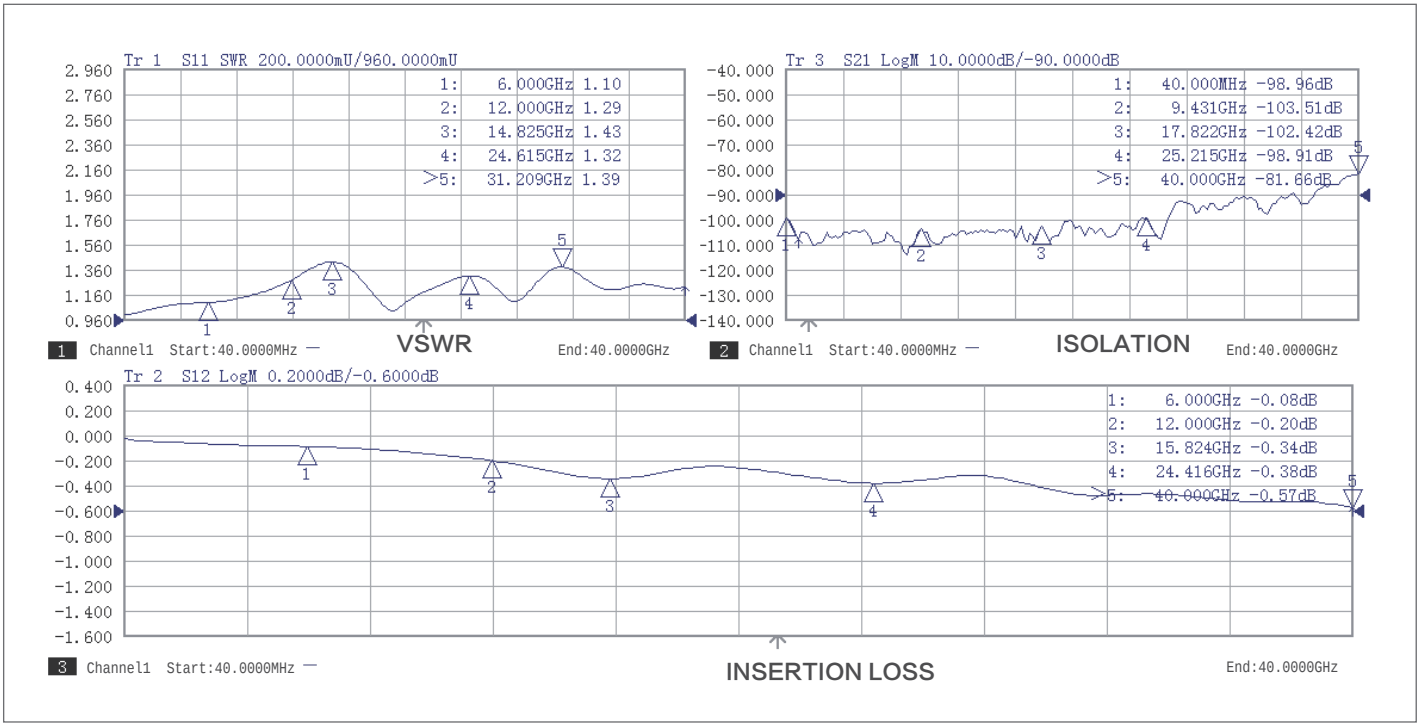
Typical Test Curves



SP6T 40GHz



SPDT 40GHz



SP6T 40GHz Terminated

SPDT 40GHz Terminated

SPDT 18GHz
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.2	70	1.2	80
6-12	0.3	70	1.3	60
12-18	0.4	60	1.4	50

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	195	100	95
	Latching	230	140	120

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	20mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

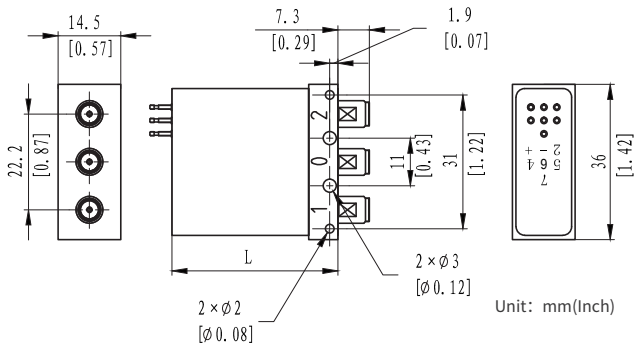
* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 18GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

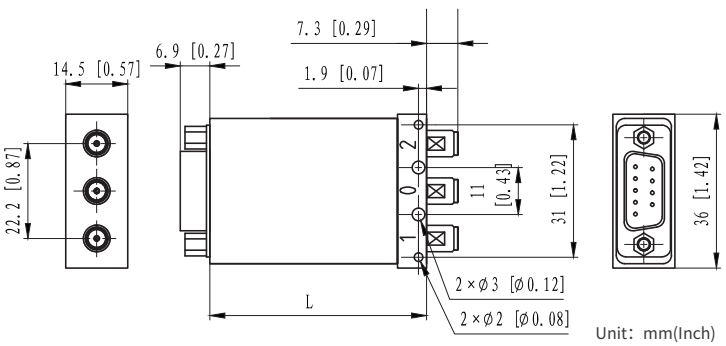
◆ Outline Drawing

Solder Pins



L = 38.5(Non TTL/TTL)
L = 42.5(Indicators)

D-SUB Male



L = 50.7(Non TTL/TTL)
L = 55.7(Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

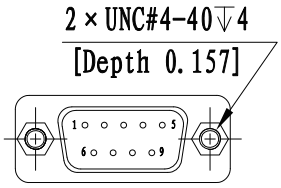
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 9Pin Male

Weight: 45g



DB9 male

◆ Truth Table

Failsafe Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	V		RF 2-0
2	N/A		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Failsafe TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	VDC		RF 2-0
2	TTL		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7~9	N/A		-

Latching Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-0
2	V2		RF 2-0
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Latching TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	VDC		
2	TTL		RF 1-0
3	GND		-
4	TTL		RF 2-0
5	Ind.1	Indicators	RF 1-0
6	Ind.2		RF 2-0
7	Ind.com		-
8~9	N/A		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Instal	Control connector
E	2	S				W			S	
Standard Series	SP2T	SMA	L:Latching F:Failsafe	06:DC~6GHz 08:DC~8GHz 12:DC~12.4GHz 18:DC~18GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative comm 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative comm And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 1:D-Sub 9 Male (2 rows)

★ EXP：E2SL0605W00S0：Standard Series、SP2T、SMA、Latching、DC~6GHz、5V、Non Terminated、Negative comm、Standard、Normal、Solder Pins.

SPDT 26.5GHz
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.2	70	1.2	80
6-12	0.3	70	1.3	60
12-18	0.4	60	1.4	50
18-26.5	0.6	55	1.6	15

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	195	100	95
	Latching	230	140	120

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	20mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

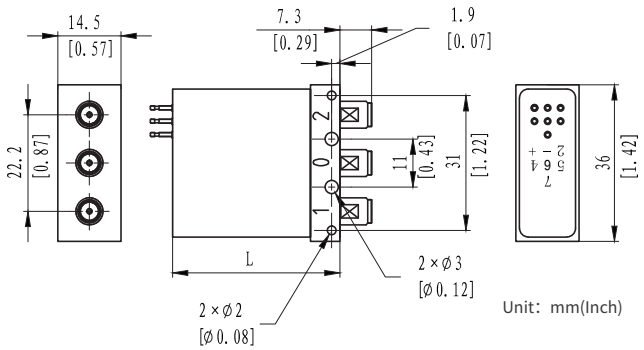
* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 26.5GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

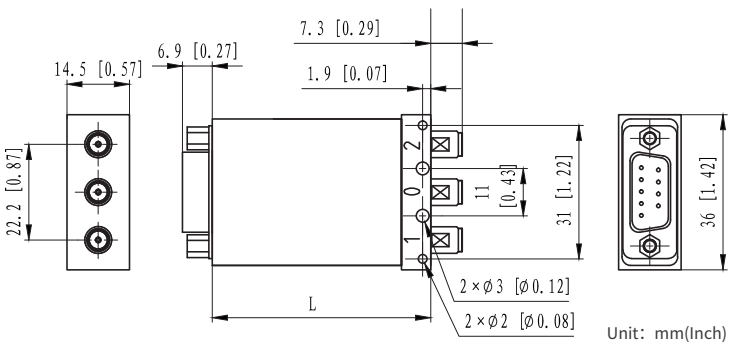
◆ Outline Drawing

Solder Pins



L = 38.5(Non TTL/TTL)
L = 42.5(Indicators)

D-SUB Male



L = 50.7(Non TTL/TTL)
L = 55.7(Indicators))

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

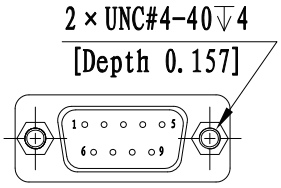
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 9Pin Male

Weight: 45g



DB9 male

◆ Truth Table

Failsafe Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	V		RF 2-0
2	N/A		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Failsafe TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	VDC		RF 2-0
2	TTL		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7~9	N/A		-

Latching Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-0
2	V2		RF 2-0
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Latching TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	VDC		
2	TTL		RF 1-0
3	GND		-
4	TTL		RF 2-0
5	Ind.1	Indicators	RF 1-0
6	Ind.2		RF 2-0
7	Ind.com		-
8~9	N/A		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	2	S		26		W			S	
Standard Series	SP2T	SMA	L:Latching F:Failsafe	DC~26GHz	05:5V 12:12V 24:24V 28:28V	Non terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 1:D-Sub 9 Male (2 rows)

★ EXP：E2SL2605W00S0：Standard Series、SP2T、SMA、Latching、DC~26GHz、5V、Non Terminated 、Negative common、Standard 、Normal、Solder Pins.

SPDT 40GHz
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.2	70	1.2	40
6-12	0.3	70	1.3	30
12-18	0.4	60	1.4	25
18-26.5	0.6	55	1.6	12
26.5-32	0.7	50	1.7	8
32-40	0.8	50	1.8	5

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	195	100	95
	Latching	230	140	120

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	20mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

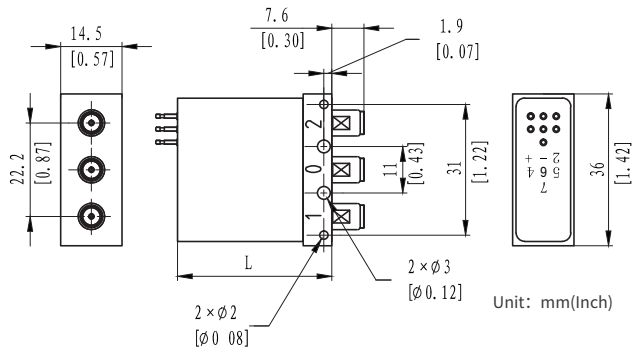
* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 40GHz
- 2.92 Connector
- Selectable TTL driver control

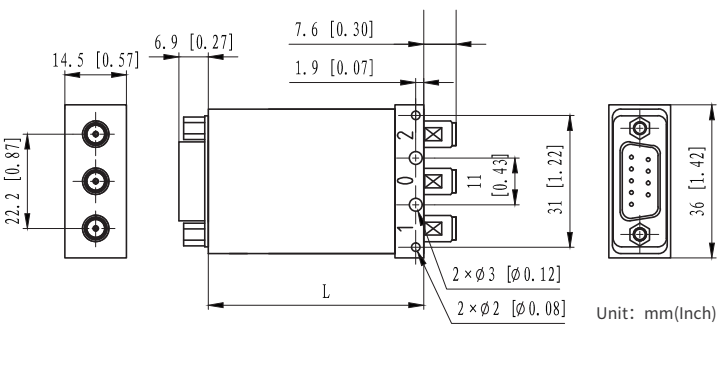
◆ Outline Drawing

Solder Pins



L = 38.5(Non TTL/TTL)
L = 42.5(Indicators)

D-SUB Male



L = 50.7(Non TTL/TTL)
L = 55.7(Indicators))

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage Temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 2.92 Female

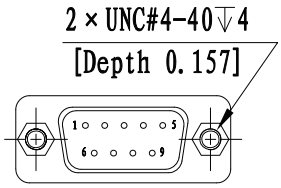
Impedance: 50Ω

Actuator Terminals: Solder Pins/D-SUB 9Pin Male

Weight: 45g

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS



DB9 male

◆ Truth Table

Failsafe Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	V		RF 2-0
2	N/A		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Failsafe TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	VDC		RF 2-0
2	TTL		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7~9	N/A		-

Latching Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-0
2	V2		RF 2-0
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Latching TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	VDC		
2	TTL		RF 1-0
3	GND		-
4	TTL		RF 2-0
5	Ind.1	Indicators	RF 1-0
6	Ind.2		RF 2-0
7	Ind.com		-
8~9	N/A		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Instal	Control connector
E	2	K		40		W			S	
Standard Series	SP2T	2.92mm	L:Latching F:Failsafe	DC~40GHz	05:5V 12:12V 24:24V 28:28V	Non terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 1:D-Sub 9 Male (2 rows)

★ EXP：E2KL4005W00S0：Standard Series、SP2T、2.92mm、Latching、DC~40GHz、5V、Non Terminated、Negative common、Standard、Normal、Solder Pins.

SPDT 43.5GHz
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.2	70	1.2	40
6-12	0.3	70	1.3	30
12-18	0.4	60	1.4	25
18-26.5	0.6	55	1.6	12
26.5-32	0.7	50	1.7	8
32-40	0.8	50	1.8	5
40-43.5	0.8	50	1.8	4

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	195	100	95
	Latching	230	140	120

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	20mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

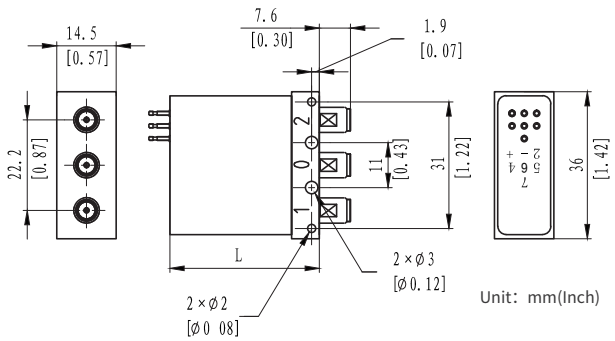
* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 43.5GHz
- 2.92 Connector
- Selectable TTL driver control

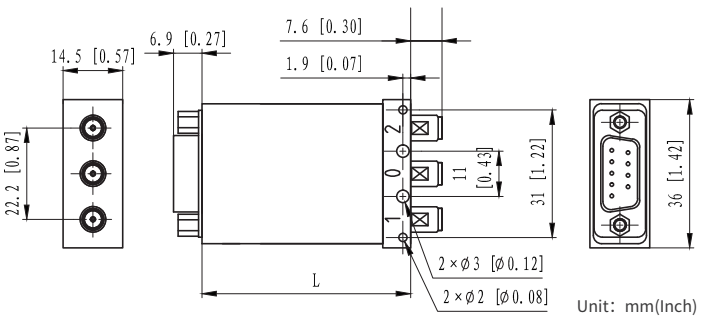
◆ Outline Drawing

Solder Pins



L = 38.5(Non TTL/TTL)
L = 42.5(Indicators)

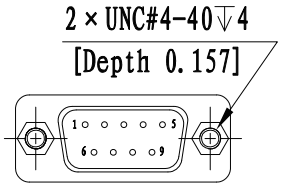
D-SUB Male



L = 50.7(Non TTL/TTL)
L = 55.7(Indicators))

◆ Specifications

Switching Sequence: Break before Make
Switching Time: 15ms max
Storage temperature: -55°C~85°C
Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)
Mechanical Life Cycles: 2 million cycles
RF Connectors: 2.92 Female
Impedance: 50Ω
Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms
Vibration Operating: 20-2000 Hz、10G RMS
Actuator Terminals: Solder Pins/D-SUB 9Pin Male
Weight: 45g



DB9 male

◆ Truth Table

Failsafe Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	V		RF 2-0
2	N/A		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Failsafe TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	VDC		RF 2-0
2	TTL		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7~9	N/A		-

Latching Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-0
2	V2		RF 2-0
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Latching TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	VDC		
2	TTL		RF 1-0
3	GND		-
4	TTL		RF 2-0
5	Ind.1	Indicators	RF 1-0
6	Ind.2		RF 2-0
7	Ind.com		-
8~9	N/A		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	2	K		43		W			S	
Standard Series	SP2T	2.92mm	L:Latching F:Failsafe	DC~43.5GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 1:D-Sub 9 Male (2 rows)

★ EXP：E2KL4305W00S0：Standard Series、SP2T、2.92mm、Latching、DC~43.5GHz、5V、Non Terminated 、Negative common、Standard 、Normal、Solder pins.

SPDT 50GHz
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.2	70	1.2	40
6-12	0.3	70	1.3	30
12-18	0.4	60	1.4	25
18-26.5	0.6	55	1.6	12
26.5-32	0.7	50	1.7	8
32-40	0.8	50	1.8	5
40-43	0.8	50	1.8	4
43-50	0.9	45	1.9	3

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	195	100	95
	Latching	230	140	120

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	20mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

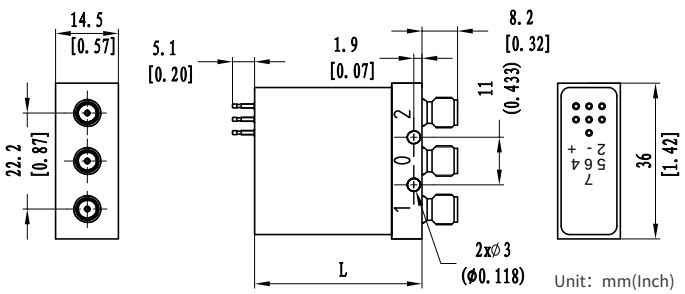
* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 50GHz
- 1.85 Connector
- Selectable TTL driver control

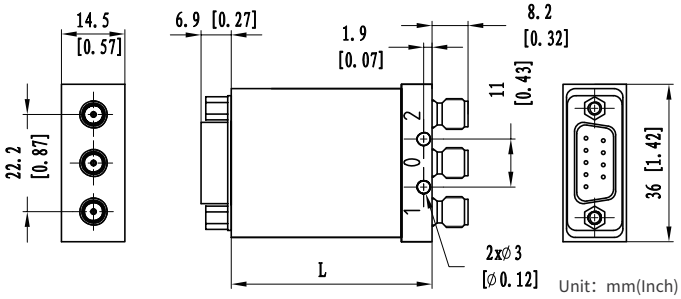
◆ Outline Drawing

Solder Pins



L = 38.7(Non TTL/TTL)
L = 44.7(Indicators)

D-SUB Male



L = 47.9(Non TTL/TTL)
L = 55.9(Indicators))

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 1.85 Female

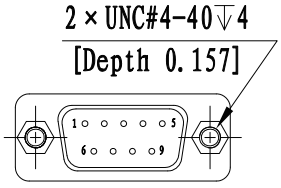
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 9Pin Male

Weight: 50g



DB9 male

◆ Truth Table

Failsafe Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	V		RF 2-0
2	N/A		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Failsafe TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	VDC		RF 2-0
2	TTL		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7~9	N/A		-

Latching Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-0
2	V2		RF 2-0
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Latching TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	VDC		
2	TTL		RF 1-0
3	GND		-
4	TTL		RF 2-0
5	Ind.1	Indicators	RF 1-0
6	Ind.2		RF 2-0
7	Ind.com		-
8~9	N/A		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	2	5		50		W			S	
Standard Series	SP2T	1.85mm	L:Latching F:Failsafe	DC~50GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 1:D-Sub 9 Male (2 rows)

★ EXP：E25L5005W00S0：Standard Series、SP2T、1.85mm、Latching、DC~50GHz、5V、Non Terminated 、Negative common、Standard 、Normal、Solder Pins.

SPDT 53GHz
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.2	70	1.2	40
6-12	0.3	70	1.3	30
12-18	0.4	60	1.4	25
18-26.5	0.6	55	1.6	12
26.5-32	0.7	50	1.7	8
32-40	0.8	50	1.8	5
40-43	0.9	45	1.9	4
43-50	0.9	45	1.9	3
50-53	1.0	45	2.0	2

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	195	100	95
	Latching	230	140	120

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	20mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

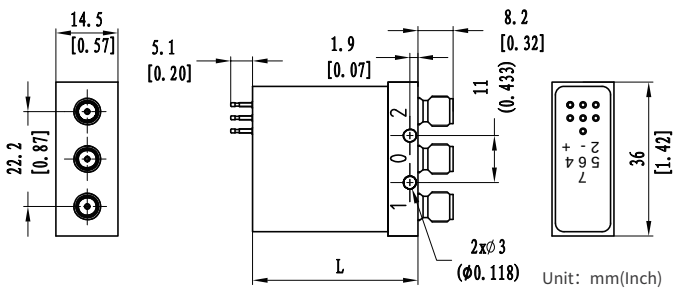
* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 53GHz
- 1.85 Connector
- Selectable TTL driver control

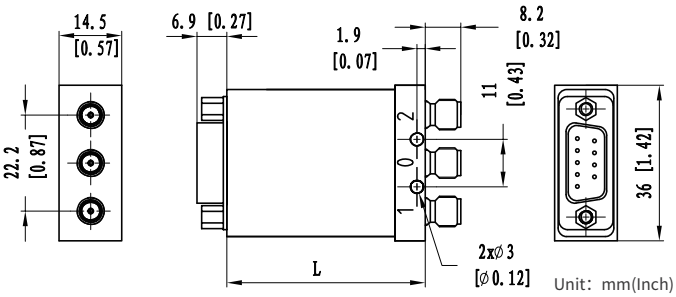
◆ Outline Drawing

Solder Pins



L = 38.7(Non TTL/TTL)
L = 44.7(Indicators)

D-SUB Male



L = 47.9(Non TTL/TTL)
L = 55.9(Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 1.85 Female

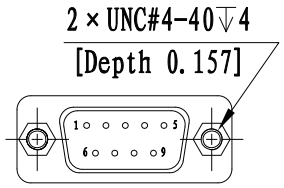
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 9Pin Male

Weight: 50g



DB9 male

◆ Truth Table

Failsafe Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	V		RF 2-0
2	N/A		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Failsafe TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	VDC		RF 2-0
2	TTL		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7~9	N/A		-

Latching Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	定义		-
1	V1		RF 1-0
2	V2		RF 2-0
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Latching TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	定义		-
1	VDC		
2	TTL		RF 1-0
3	GND		-
4	TTL		RF 2-0
5	Ind.1	Indicators	RF 1-0
6	Ind.2		RF 2-0
7	Ind.com		-
8~9	N/A		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	2	5		53		W			S	
Standard Series	SP2T	1.85mm	L:Latching F:Failsafe	DC~53GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 1:D-Sub 9 Male (2 rows)

★ EXP：E25L5305W00S0：Standard Series、SP2T、1.85mm、Latching、DC~53GHz、5V、Non Terminated、Negative common、Standard、Normal、Solder Pins.

SPDT 67GHz
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.2	70	1.2	40
6-12	0.3	70	1.3	30
12-18	0.4	60	1.4	25
18-26.5	0.6	55	1.6	12
26.5-32	0.7	50	1.7	8
32-40	0.8	50	1.8	5
40-43	0.9	45	1.9	4
43-50	1.0	45	2.0	3
50-53	1.1	45	2.1	2
53-67	1.2	45	2.2	2

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	195	100	95
	Latching	230	140	120

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	20mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

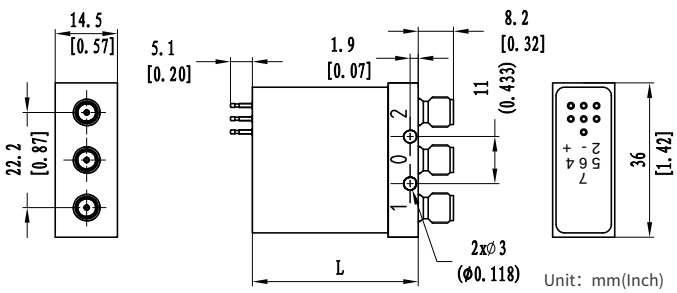
* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 67GHz
- 1.85 Connector
- Selectable TTL driver control

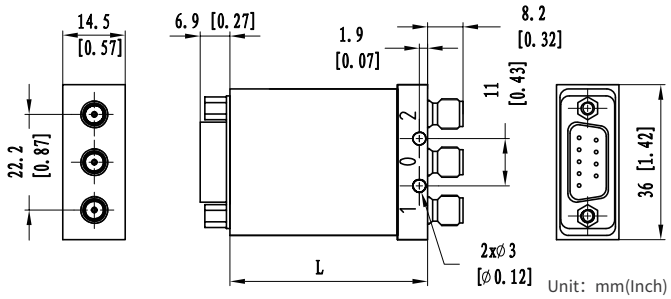
◆ Outline Drawing

Solder Pins



L = 38.7(Non TTL/TTL)
L = 44.7(Indicators)

D-SUB Male



L = 47.9(Non TTL/TTL)
L = 55.9(Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 1.85 Female

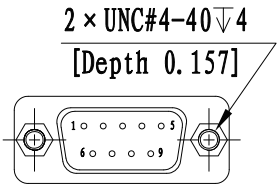
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 9Pin Male

Weight: 50g



DB9 male

◆ Truth Table

Failsafe Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	V		RF 2-0
2	N/A		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Failsafe TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	VDC		RF 2-0
2	TTL		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7~9	N/A		-

Latching Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-0
2	V2		RF 2-0
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Latching TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	VDC		
2	TTL		RF 1-0
3	GND		-
4	TTL		RF 2-0
5	Ind.1	Indicators	RF 1-0
6	Ind.2		RF 2-0
7	Ind.com		-
8~9	N/A		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	2	5		67		W			S	
Standard Series	SP2T	1.85mm	L:Latching F:Failsafe	DC~67GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 1:D-Sub 9 Male (2 rows)

★ EXP：E25L6705W00S0：Standard Series、SP2T、1.85mm、Latching、DC~67GHz、5V、Non Terminated 、Negative common、Standard 、Normal、Solder Pins.

SPDT 18GHz
Failsafe

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-5	0.30	60	1.40	70
5-12	0.40	50	1.50	50
12-18	0.70	40	1.70	40

◆ Product Functions

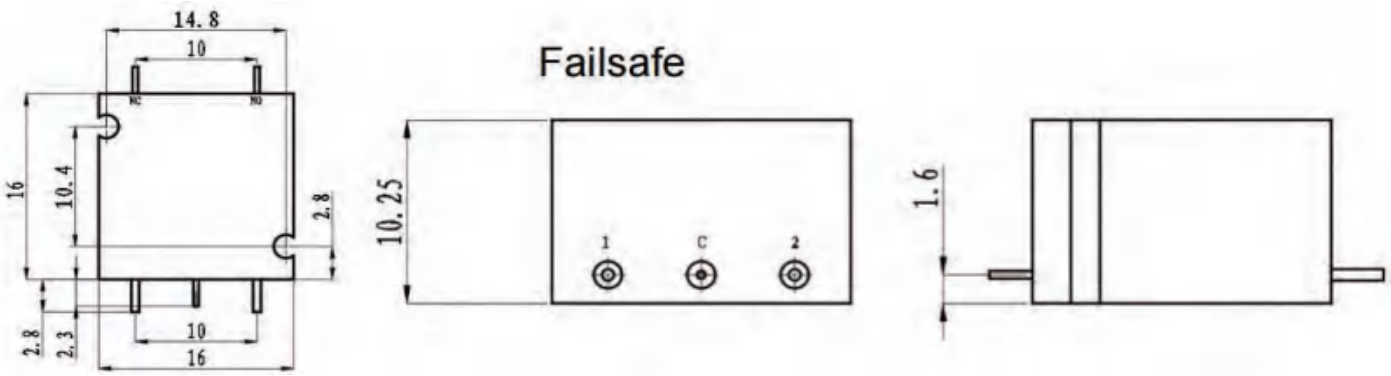
- DC to 18GHz
- Low loss, Low VSWR
- Miniature
- RF connectors Φ0.45 mm Pins

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24
Coil Current(mA)	Failsafe	170	90

* It can be selected according to user requirements

◆ Outline Drawing



◆ Specifications

Frequency Range：DC~18GHz

Mechanical Life Cycles: 1 million cycles

Weight：17g

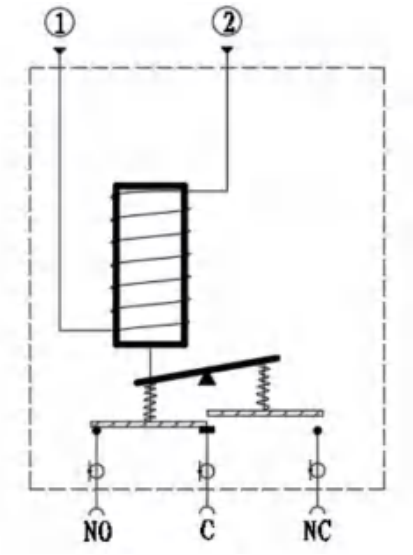
RF connectors：ϕ0.45mm

Switching Time：<15ms

Storage Temperature: -55℃~85℃

Operating temperature: -25℃~65℃(Standard)
-45℃~85℃(Extended)

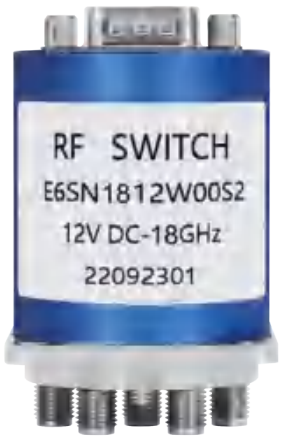
◆ Drive Circuit Diagram



◆ Truth Table

Switching Mode		RF Channel	Pin Deflnition Pin Encourage
Failsafe	NO TTL	C-NC	NC
		C-NO	1:VDC，2:GND

SP3T-6T 18GHz
Normally open



◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.5	60	1.5	50

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

⋆ It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

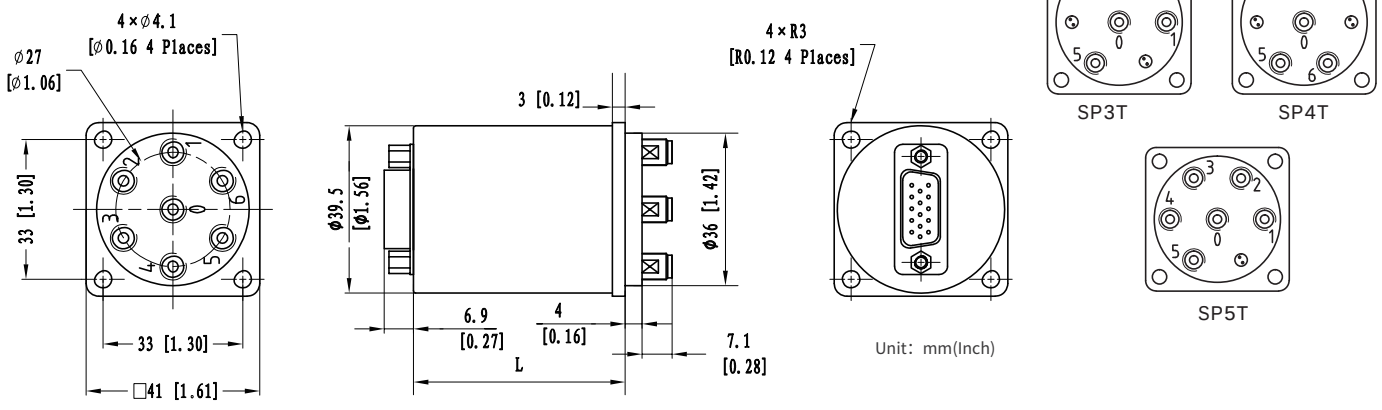
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

⋆ Connect VDC &GND before the function operates

◆ Product Functions

- DC to 18GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

◆ Outline Drawing



L = 50(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

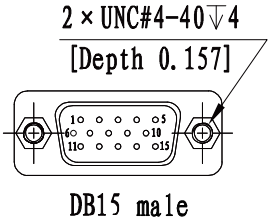
Impedance: 50Ω

Actuator Terminals: Solder Pins/D-SUB 15Pin Male

Weight: 140g

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS



◆ Truth Table

Normally open Non TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Normally open TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		S	N			W			S	
Standard Series	3:SP3T 4:SP4T 5:SP5T 6:SP6T	SMA	Normally Open	06:DC~6GHz 08:DC~8GHz 12:DC~12.4GHz 18:DC~18GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Ground Plane And Indicators 5:TTL driver And Indicators 6.Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 2:D-Sub 15 Male (3 rows)

★ EXP：E3SN0605W00S0：Standard Series、SP3T、SMA、Normally Open、DC~6GHz、5V、Non Terminated 、Negative common、Standard 、Normal、Solder Pins.

SP3T-6T 26.5GHz
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.5	60	1.5	50
18-26.5	0.6	55	1.6	15

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

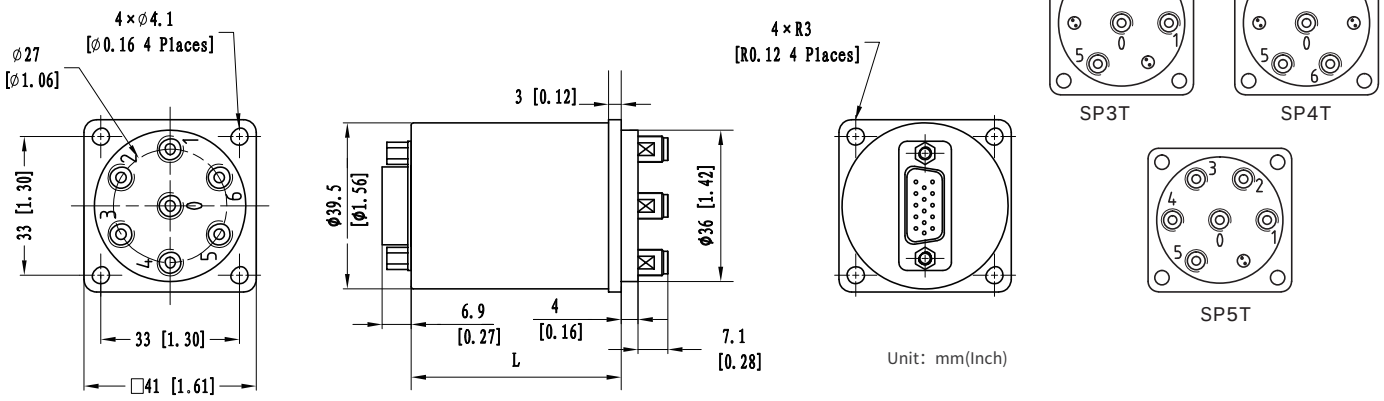
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 26.5GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

◆ Outline Drawing



Unit: mm(Inch)

L = 50(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

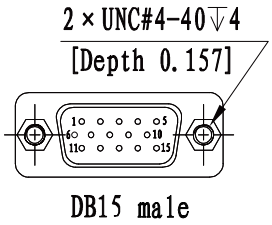
Impedance: 50Ω

Actuator Terminals: Solder Pins/D-SUB 15Pin Male

Weight: 140g

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS



◆ Truth Table

Normally open Non TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Normally open TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		S	N	26		W			S	
Standard Series	3:SP3T 4:SP4T 5:SP5T 6:SP6T	SMA	Normally Open	DC~26.5GHz	05:5V 12:12V 24:24V 28:28V	Non terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6.Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 2:D-Sub 15 Male (3 rows)

★ EXP：E3SN2605W00S0：Standard Series、SP3T、SMA、Normally Open、DC~26.5GHz、5V、Non Terminated 、Negative common、Standard 、Normal、Solder Pins.

SP3T-6T 40GHz
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	70	1.4	30
12-18	0.5	60	1.5	25
18-26.5	0.7	55	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

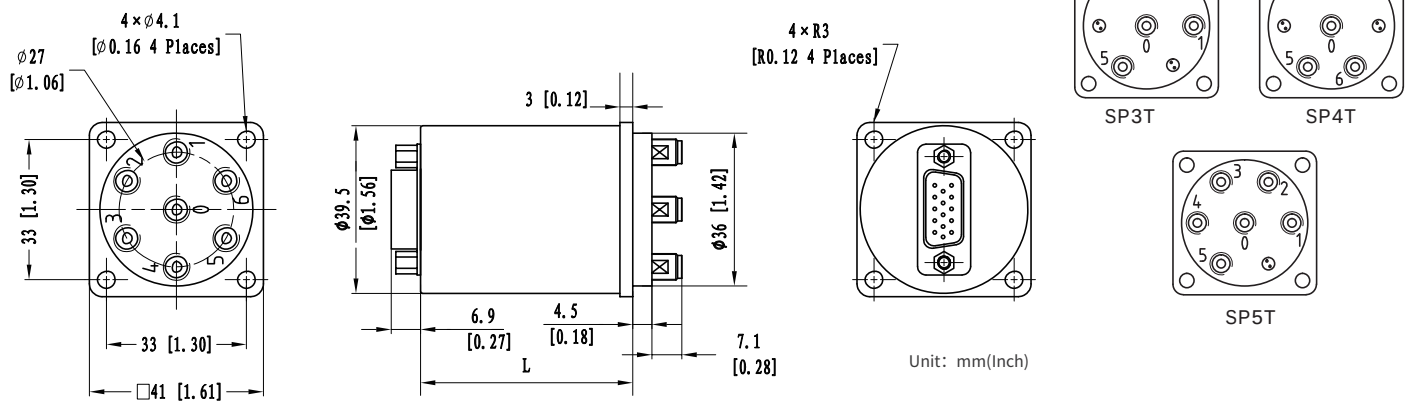
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 40GHz
- Low loss, Low VSWR, High Isolation
- 2.92 Connector
- Selectable TTL driver control

◆ Outline Drawing



Unit: mm(Inch)

L = 50(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 2.92 Female

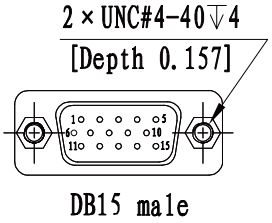
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 15Pin Male

Weight: 140g



◆ Truth Table

Normally open Non TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Normally open TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		K	N	40		W			S	
Standard Series	3:SP3T 4:SP4T 5:SP5T 6:SP6T	2.92mm	Normally Open	DC~40GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6.Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 2:D-Sub 15 Male (3 rows)

★ EXP：E3KN4005W00S0：Standard Series、SP3T、2.92mm、Normally Open、DC~40GHz、5V、Non Terminated 、Negative common、Standard 、Normal、Solder Pins.

SP3T-6T 43.5GHz
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	70	1.4	30
12-18	0.5	60	1.5	25
18-26.5	0.7	55	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5
40-43.5	1.0	50	2.0	4

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

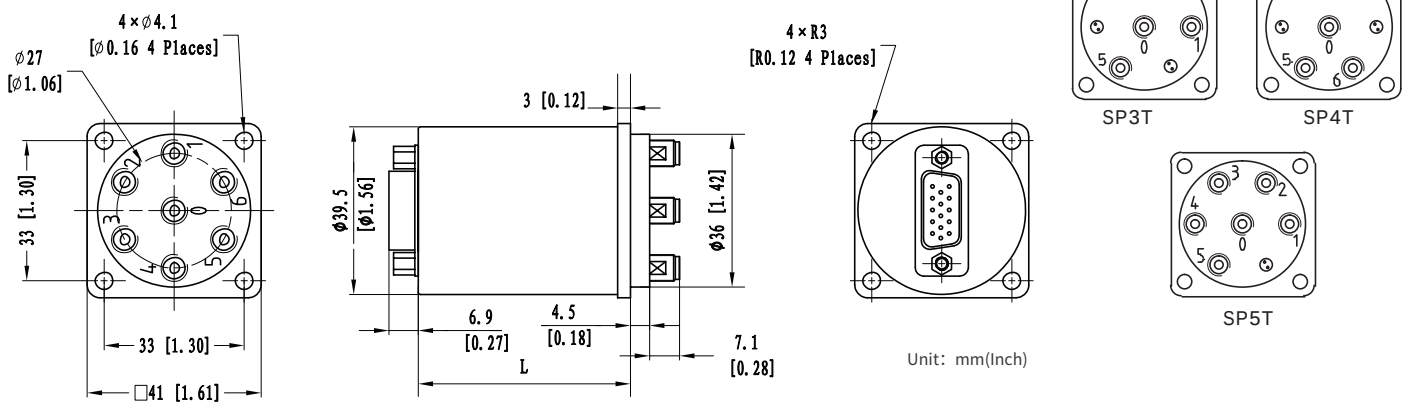
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 43.5GHz
- Low loss, Low VSWR, High Isolation
- 2.92 Connector
- Selectable TTL driver control

◆ Outline Drawing



L = 50(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 2.92 Female

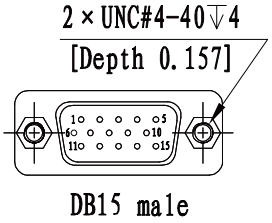
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 15Pin Male

Weight: 140g



◆ Truth Table

Normally open Non TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Normally open TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ 产品选型

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		K	N	43		W			S	
Standard Series	3:SP3T 4:SP4T 5:SP5T 6:SP6T	2.92mm	Normally Open	DC~43.5GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6.Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 2:D-Sub 15 Male (3 rows)

★EXP：E3KN4305W00S0：Standard Series、SP3T、2.92mm、Normally Open、DC~43.5GHz、5V、Non Terminated 、Negative common、Standard 、Normal、Solder Pins.

SP3T-6T 50GHz
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	70	1.4	30
12-18	0.5	60	1.5	25
18-26.5	0.7	55	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5
40-43	1.0	50	2.0	4
43-50	1.2	50	2.2	3

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

⋆ It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

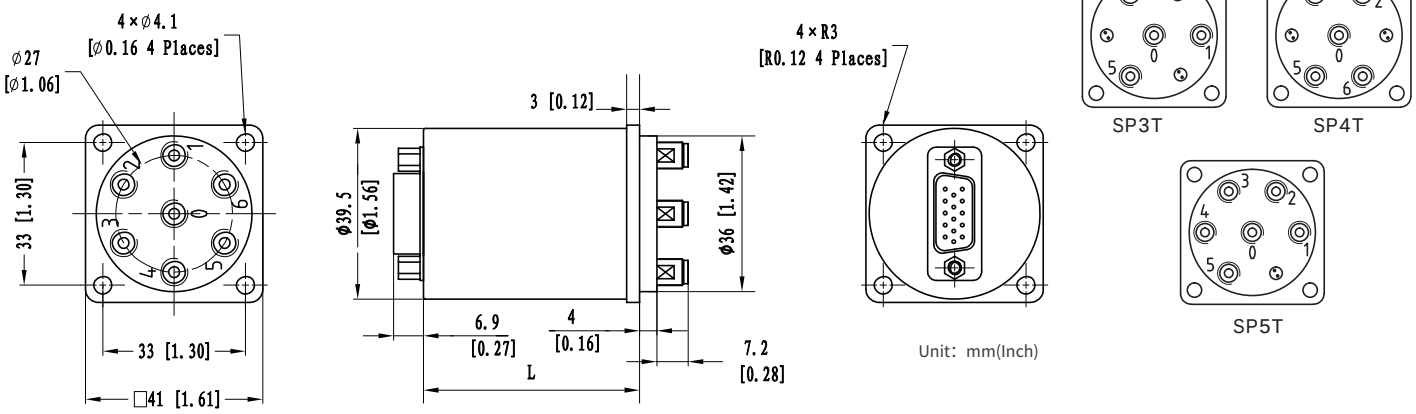
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

⋆ Connect VDC &GND before the function operates

◆ Product Functions

- DC to 50GHz
- Low loss, Low VSWR, High Isolation
- 1.85 Connector
- Selectable TTL driver control

◆ Outline Drawing



Unit: mm(Inch)

L = 50(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 1.85 Female

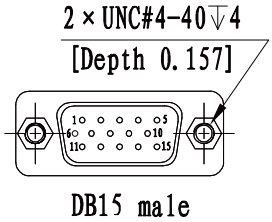
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 15Pin Male

Weight: 140g



◆ Truth Table

Normally open Non TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Normally open TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		5	N	50		W			S	
Standard Series	3:SP3T 4:SP4T 5:SP5T 6:SP6T	1.85mm	Normally Open	DC~50GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6.Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 2:D-Sub 15 Male (3 rows)

★ EXP：E35N5005W00S0：Standard Series、SP3T、1.85mm、Normally Open、DC~50GHz、5V、Non Terminated 、Negative common、Standard 、Normal、Solder Pins.

SP3T-6T 53GHz
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	70	1.4	30
12-18	0.5	60	1.5	25
18-26.5	0.7	55	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5
40-43	1.0	50	2.0	4
43-50	1.2	50	2.2	3
50-53	1.3	50	2.2	2

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

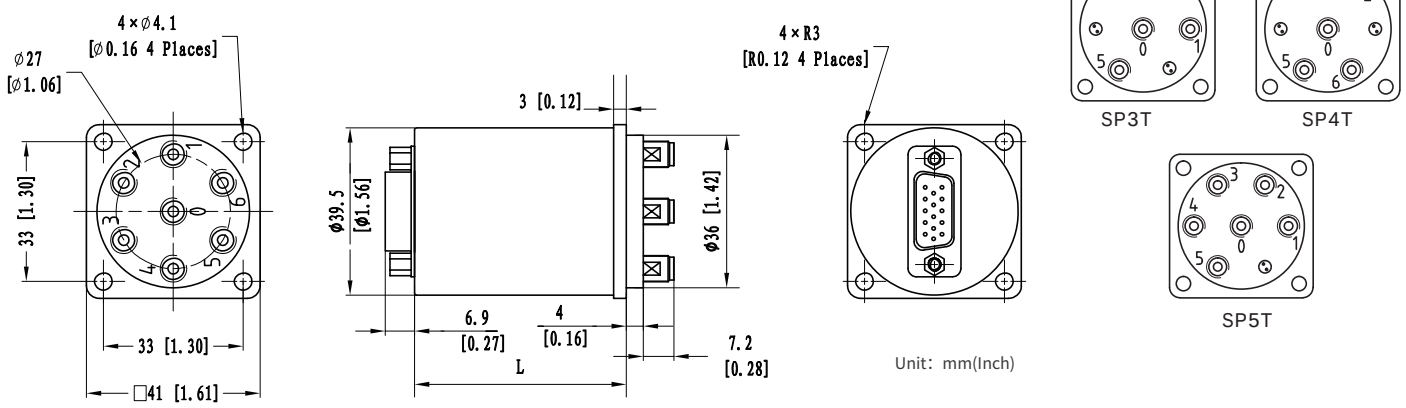
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 53GHz
- Low loss, Low VSWR, High Isolation
- 1.85 Connector
- Selectable TTL driver control

◆ Outline Drawing



L = 50(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 1.85 Female

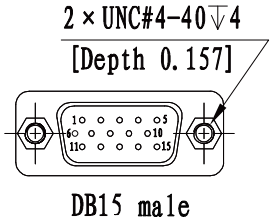
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 15Pin Male

Weight: 140g



◆ Truth Table

Normally open Non TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Normally open TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		5	N	53		W			S	

- Series: E — Standard Series
- Number Of Positions: 3:SP3T; 4:SP4T; 5:SP5T; 6:SP6T
- Rf Connectors: 5 — 1.85mm
- Type: N — Normally Open
- Frequency: 53 — DC~53GHz
- Actuator Voltage: 05:5V; 12:12V; 24:24V; 28:28V
- Terminated: W — Non Terminated
- Driver: 0:Negative common; 1:TTL Driver; 2:Positive Common; 4:Negative common And Indicators; 5:TTL driver And Indicators; 6.Positive Common And Indicators
- Operating Temperature: 0:Standard (-25°C~65°C); 1:Extended1 (-45°C~85°C); 2:Extended2 (-55°C~85°C)
- Install: S — Normal
- Control connector: 0:Solder Pins; 2:D-Sub 15 Male (3 rows)

★ EXP：E35N5305W00S0：Standard Series、SP3T、1.85mm、Normally Open、DC~53GHz、5V、Non Terminated 、Negative common、Standard 、Normal、Solder Pins.

mini SP3T-6T 18GHz
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.5	60	1.5	50

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

⋆ It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

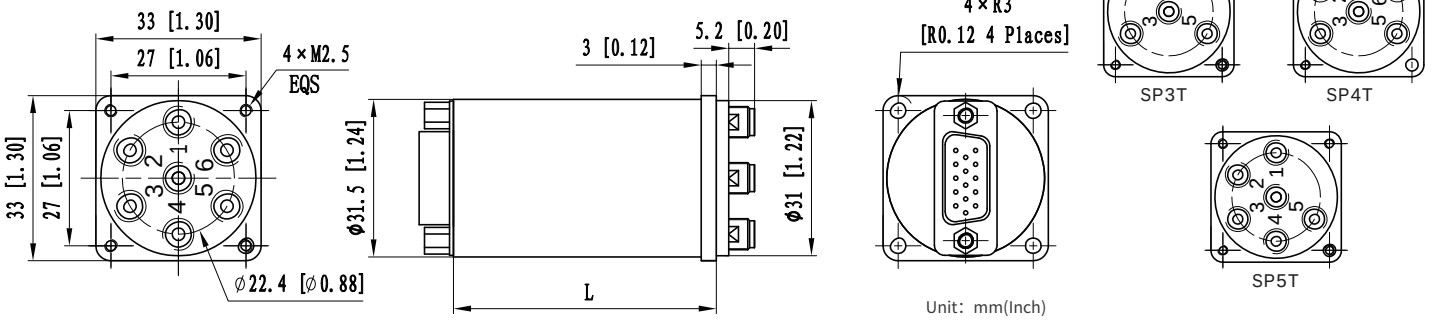
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

⋆ Connect VDC &GND before the function operates

◆ Product Functions

- DC to 18GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control
- Miniaturization

◆ Outline Drawing



L = 67.5(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

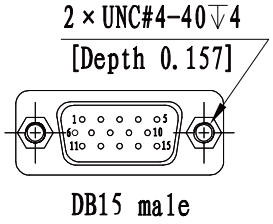
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 15Pin Male

Weight: 120g



◆ Truth Table

Normally open Non TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Normally open TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		S	N			W			S	
Standard Series	R:mini SP3T S:mini SP4T T:mini SP5T U:mini SP6T	SMA	Normally Open	06:DC~6GHz 08:DC~8GHz 12:DC~12.4GHz 18:DC~18GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6.Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 2:D-Sub 15 Male (3 rows)

★ EXP：ERSN0605W00S0：Standard Series、Mini SP3T、SMA、Normally Open、DC~6GHz、5V、Non Terminated 、Negative common、Standard 、Normal、Solder Pins.

mini SP3T-6T 26.5GHz
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.5	60	1.5	50
18-26.5	0.6	55	1.6	15

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

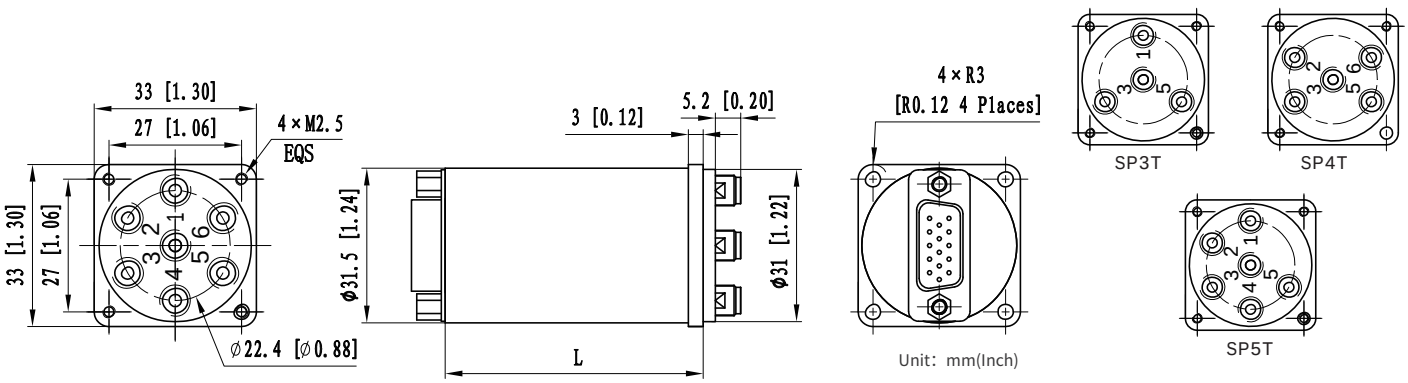
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 26.5GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control
- Miniaturization

◆ Outline Drawing



L = 67.5(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

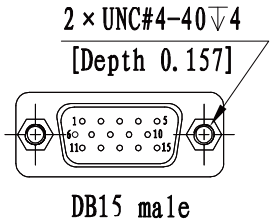
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 15Pin Male

Weight: 120g



◆ Truth Table

Normally open Non TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Normally open TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		S	N	26		W			S	
Standard Series	R:mini SP3T S:mini SP4T T:mini SP5T U:mini SP6T	SMA	Normally Open	DC~26.5GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6.Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 2:D-Sub 15 Male (3 rows)

★ EXP：ERSN2605W00S0：Standard Series、Mini SP3T、SMA、Normally Open、DC~26.5GHz、5V、Non Terminated 、Negative common、Standard 、Normal、Solder Pins.

mini SP3T-6T 40GHz
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	70	1.4	30
12-18	0.5	60	1.5	25
18-26.5	0.7	55	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

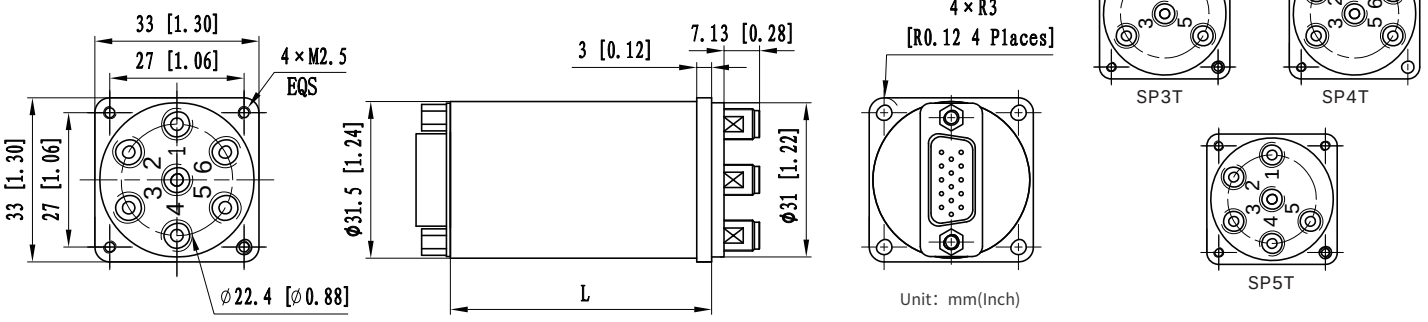
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 40GHz
- Low loss, Low VSWR, High Isolation
- 2.92 Connector
- Selectable TTL driver control
- Miniaturization

◆ Outline Drawing



L = 67.5(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 2.92 Female

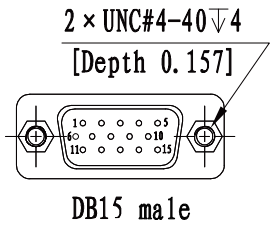
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 15Pin Male

Weight: 120g



◆ Truth Table

Normally open Non TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Normally open TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		K	N	40		W			S	
Standard Series	R:mini SP3T S:mini SP4T T:mini SP5T U:mini SP6T	2.92mm	Normally Open	DC~40GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6.Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 2:D-Sub 15 Male (3 rows)

★EXP：ERKN4005W00S0：Standard Series、Mini SP3T、2.92mm、Normally Open、DC~40GHz、5V、Non Terminated 、Negative common、Standard 、Normal、Solder Pins.

mini SP3T-6T 43.5GHz
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	70	1.4	30
12-18	0.5	60	1.5	25
18-26.5	0.7	55	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5
40-43.5	1.0	50	2.0	4

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

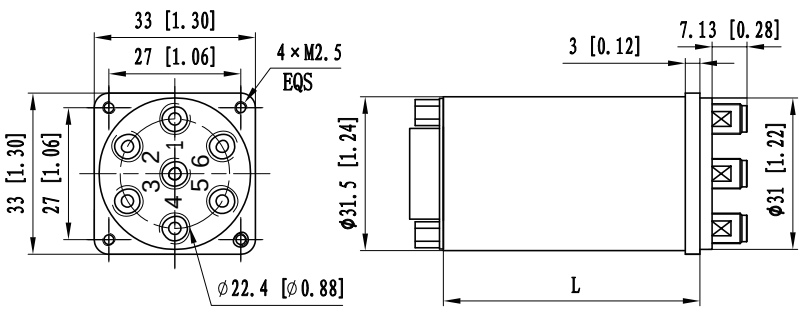
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

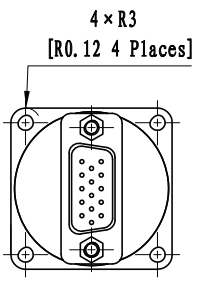
* Connect VDC &GND before the function operates

◆ Product Functions

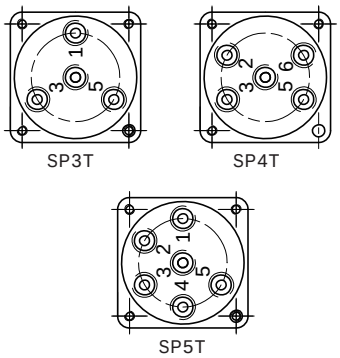
- DC to 43.5GHz
- Low loss, Low VSWR, High Isolation
- 2.92 Connector
- Selectable TTL driver control
- Miniaturization

◆ Outline Drawing





Unit: mm(Inch)



L = 67.5(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 2.92 Female

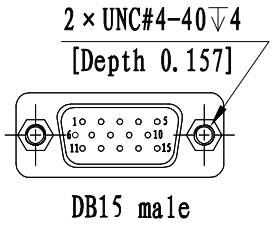
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 15Pin Male

Weight: 120g



◆ Truth Table

Normally open Non TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Normally open TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		K	N	43		W			S	
Standard Series	R:mini SP3T S:mini SP4T T:mini SP5T U:mini SP6T	2.92mm	Normally Open	DC~43.5GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6.Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 2:D-Sub 15 Male (3 rows)

★ EXP：ERKN4305W00S0：Standard Series、Mini SP3T、2.92mm、Normally Open、DC~43.5GHz、5V、Non Terminated 、Negative common、Standard 、Normal、Solder Pins.

SP7T-8T 18GHz
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.5	55	1.5	50

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

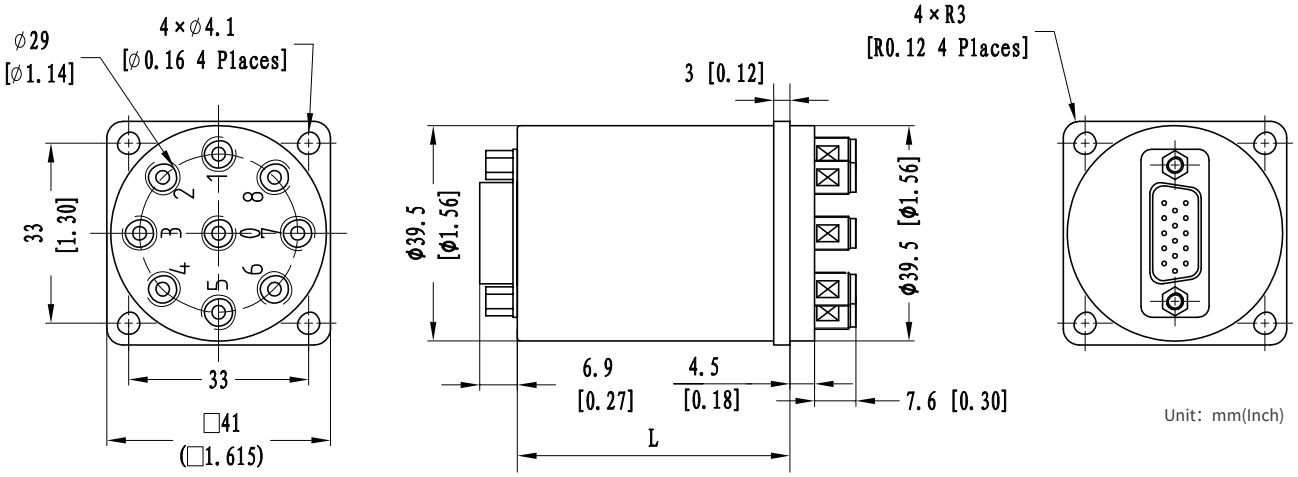
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 18GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

◆ Outline Drawing



Unit: mm(Inch)

L = 50(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

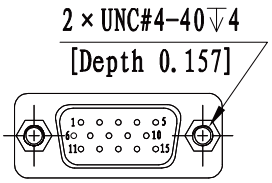
Impedance: 50Ω

Actuator Terminals: D-SUB 15/26Pin Male

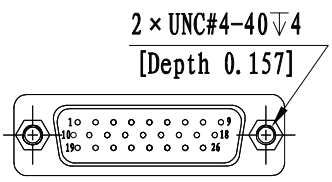
Weight: 145g

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS



DB15 male



DB26 male

* Note: No indication function, control interface DB15 Male.

◆ Truth Table

Normally open Non TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	V1		RF 1-0	RF 1-0
2	V2		RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0
4	V4		RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0
6	V6		RF 6-0	RF 6-0
7	V7		RF 7-0	RF 7-0
8	V8		-	RF 8-0
9	GND		-	-
10	Ind.1	Indicators	RF 1-0	RF 1-0
11	Ind.2		RF 2-0	RF 2-0
12	Ind.3		RF 3-0	RF 3-0
13	Ind.4		RF 4-0	RF 4-0
14	Ind.5		RF 5-0	RF 5-0
15	Ind.6		RF 6-0	RF 6-0
16	Ind.7		RF 7-0	RF 7-0
17	Ind.8		-	RF 8-0
18	Ind.com		-	-
19	VDC		-	-
20~26	N/A		-	-

Normally open TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	TTL		RF 1-0	RF 1-0
2	TTL		RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0
4	TTL		RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0
6	TTL		RF 6-0	RF 6-0
7	TTL		RF 7-0	RF 7-0
8	TTL		-	RF 8-0
9	VDC		-	-
10	GND		-	-
11	Ind.1	Indicators	RF 1-0	RF 1-0
12	Ind.2		RF 2-0	RF 2-0
13	Ind.3		RF 3-0	RF 3-0
14	Ind.4		RF 4-0	RF 4-0
15	Ind.5		RF 5-0	RF 5-0
16	Ind.6		RF 6-0	RF 6-0
17	Ind.7		RF 7-0	RF 7-0
18	Ind.8		-	RF 8-0
19	Ind.com		-	-
20~26	N/A		-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		S	N			W			S	
Standard Series	7:SP7T 8:SP8T	SMA	Normally Open	06:DC~6GHz 08:DC~8GHz 12:DC~12.4GHz 18:DC~18GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6.Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	2:D-Sub 15 Male (3 rows) 5:D-Sub 26 Male (3 rows)

★ EXP：E7SN0605W00S2：Standard Series、SP7T、SMA、Normally Open、DC~6GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

SP7T-8T 26.5GHz
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.5	55	1.5	50
18-26.5	0.7	50	1.7	15

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

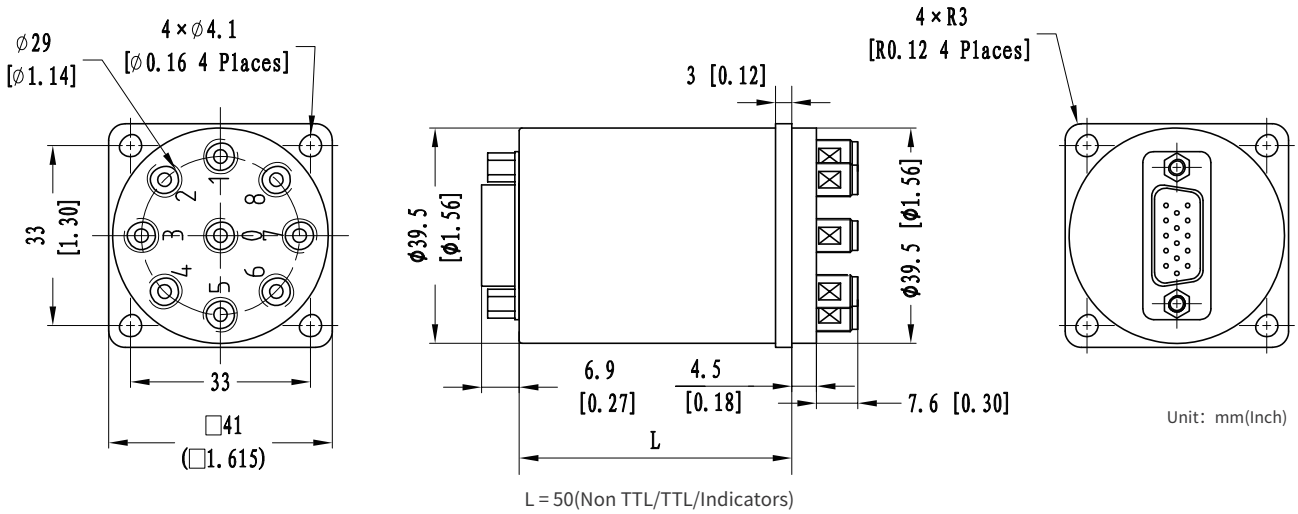
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 26.5GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

◆ Outline Drawing



Unit: mm(Inch)

L = 50(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

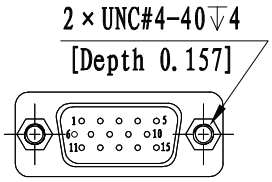
Impedance: 50Ω

Actuator Terminals: D-SUB 15/26Pin Male

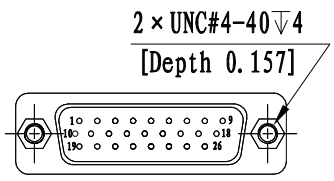
Weight: 145g

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS



DB15 male



DB26 male

* Note: No indication function, control interface DB15 Male.

◆ Truth Table

Normally open Non TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	V1		RF 1-0	RF 1-0
2	V2		RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0
4	V4		RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0
6	V6		RF 6-0	RF 6-0
7	V7		RF 7-0	RF 7-0
8	V8		-	RF 8-0
9	GND		-	-
10	Ind.1	Indicators	RF 1-0	RF 1-0
11	Ind.2		RF 2-0	RF 2-0
12	Ind.3		RF 3-0	RF 3-0
13	Ind.4		RF 4-0	RF 4-0
14	Ind.5		RF 5-0	RF 5-0
15	Ind.6		RF 6-0	RF 6-0
16	Ind.7		RF 7-0	RF 7-0
17	Ind.8		-	RF 8-0
18	Ind.com		-	-
19	VDC		-	-
20~26	N/A		-	-

Normally open TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	TTL		RF 1-0	RF 1-0
2	TTL		RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0
4	TTL		RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0
6	TTL		RF 6-0	RF 6-0
7	TTL		RF 7-0	RF 7-0
8	TTL		-	RF 8-0
9	VDC		-	-
10	GND		-	-
11	Ind.1	Indicators	RF 1-0	RF 1-0
12	Ind.2		RF 2-0	RF 2-0
13	Ind.3		RF 3-0	RF 3-0
14	Ind.4		RF 4-0	RF 4-0
15	Ind.5		RF 5-0	RF 5-0
16	Ind.6		RF 6-0	RF 6-0
17	Ind.7		RF 7-0	RF 7-0
18	Ind.8		-	RF 8-0
19	Ind.com		-	-
20~26	N/A		-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		S	N	26		W			S	
Standard Series	7:SP7T 8:SP8T	SMA	Normally Open	DC~26.5GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6.Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	2:D-Sub 15 Male (3 rows) 5:D-Sub 26 Male (3 rows)

★ EXP：E7SN2605W00S2：Standard Series、SP7T、SMA、Normally Open、DC~26.5GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

SP7T-8T 40GHz
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	60	1.4	30
12-18	0.5	55	1.5	25
18-26.5	0.7	50	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

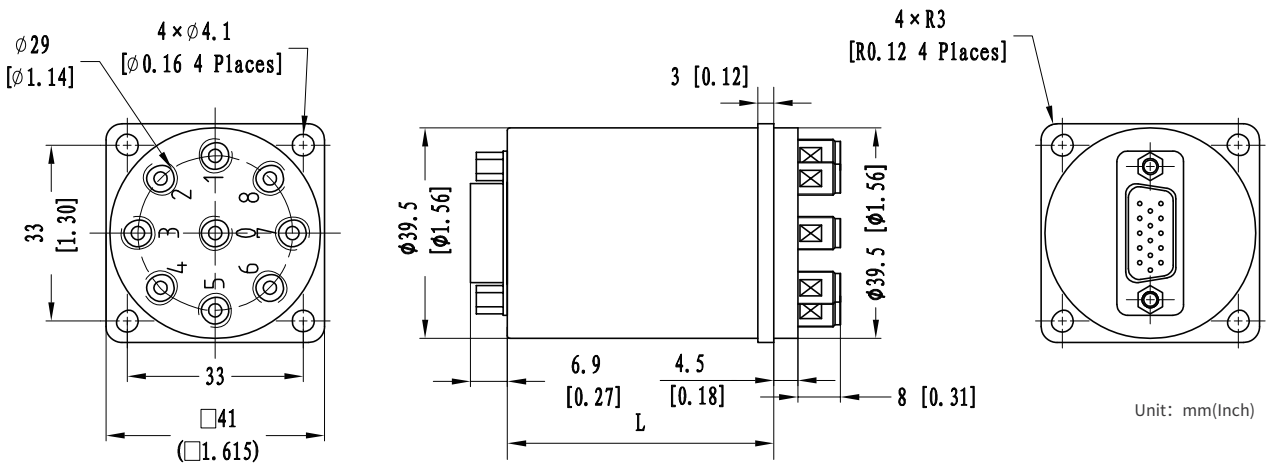
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 40GHz
- Low loss, Low VSWR, High Isolation
- 2.92 Connector
- Selectable TTL driver control

◆ Outline Drawing



L = 50(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 2.92 Female

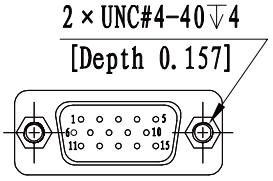
Impedance: 50Ω

Actuator Terminals: D-SUB 15Pin Male

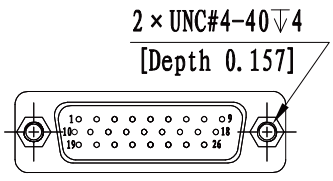
Weight: 145g

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS



DB15 male



DB26 male

* Note: No indication function, control interface DB15 Male.

◆ Truth Table

Normally open Non TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	V1		RF 1-0	RF 1-0
2	V2		RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0
4	V4		RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0
6	V6		RF 6-0	RF 6-0
7	V7		RF 7-0	RF 7-0
8	V8		-	RF 8-0
9	GND		-	-
10	Ind.1	Indicators	RF 1-0	RF 1-0
11	Ind.2		RF 2-0	RF 2-0
12	Ind.3		RF 3-0	RF 3-0
13	Ind.4		RF 4-0	RF 4-0
14	Ind.5		RF 5-0	RF 5-0
15	Ind.6		RF 6-0	RF 6-0
16	Ind.7		RF 7-0	RF 7-0
17	Ind.8		-	RF 8-0
18	Ind.com		-	-
19	VDC		-	-
20~26	N/A		-	-

Normally open TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	TTL		RF 1-0	RF 1-0
2	TTL		RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0
4	TTL		RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0
6	TTL		RF 6-0	RF 6-0
7	TTL		RF 7-0	RF 7-0
8	TTL		-	RF 8-0
9	VDC		-	-
10	GND		-	-
11	Ind.1	Indicators	RF 1-0	RF 1-0
12	Ind.2		RF 2-0	RF 2-0
13	Ind.3		RF 3-0	RF 3-0
14	Ind.4		RF 4-0	RF 4-0
15	Ind.5		RF 5-0	RF 5-0
16	Ind.6		RF 6-0	RF 6-0
17	Ind.7		RF 7-0	RF 7-0
18	Ind.8		-	RF 8-0
19	Ind.com		-	-
20~26	N/A		-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		K	N	40		W			S	
Standard Series	7:SP7T 8:SP8T	2.92mm	Normally Open	DC~40GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6.Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	2:D-Sub 15 Male (3 rows) 5:D-Sub 26 Male (3 rows)

★ EXP：E7KN4005W00S2：Standard Series、SP7T、2.92mm、Normally Open、DC~40GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

SP9T-10T 18GHz
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.5	55	1.5	50

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

⋆ It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

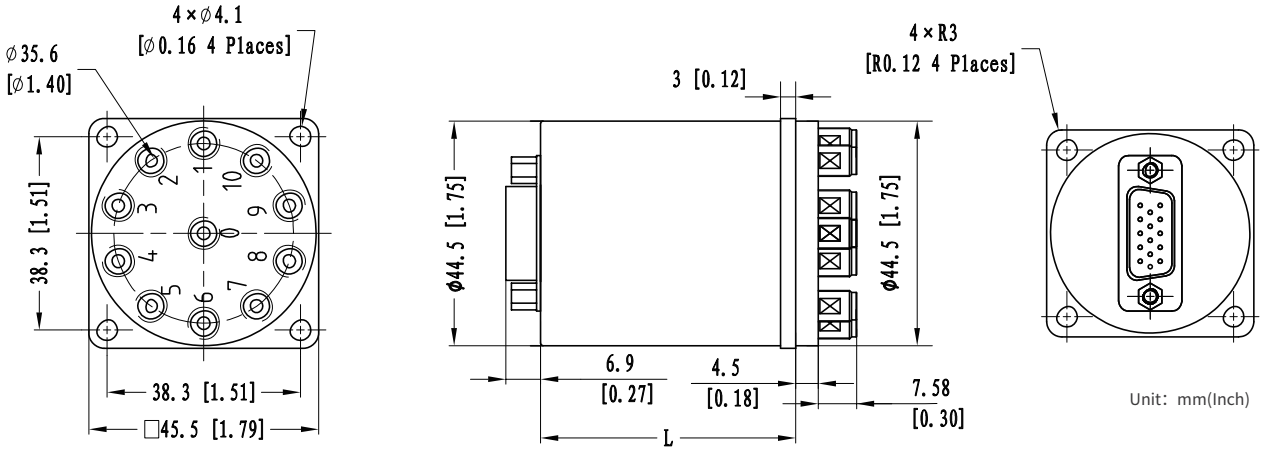
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

⋆ Connect VDC &GND before the function operates

◆ Product Functions

- DC to 18GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

◆ Outline Drawing



Unit: mm(Inch)

L = 50(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

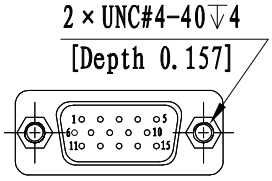
Impedance: 50Ω

Actuator Terminals: D-SUB 15/26Pin Male

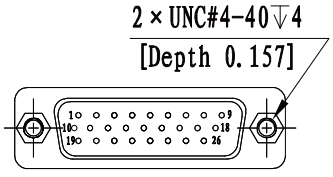
Weight: 185g

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS



DB15 male



DB26 male

* Note: No indication function, control interface DB15 Male.

◆ Truth Table

Normally open Non TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP9T	SP10T
1	V1		RF 1-0	RF 1-0
2	V2		RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0
4	V4		RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0
6	V6		RF 6-0	RF 6-0
7	V7		RF 7-0	RF 7-0
8	V8		RF 8-0	RF 8-0
9	V9		RF 9-0	RF 9-0
10	V10		-	RF 10-0
11	GND		-	-
12	Ind.1	Indicators	RF 1-0	RF 1-0
13	Ind.2		RF 2-0	RF 2-0
14	Ind.3		RF 3-0	RF 3-0
15	Ind.4		RF 4-0	RF 4-0
16	Ind.5		RF 5-0	RF 5-0
17	Ind.6		RF 6-0	RF 6-0
18	Ind.7		RF 7-0	RF 7-0
19	Ind.8		RF 8-0	RF 8-0
20	Ind.9		RF 9-0	RF 9-0
21	Ind.10		-	RF 10-0
22	Ind.com		-	-
23	VDC		-	-
24~26	N/A		-	-

Normally open TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP9T	SP10T
1	TTL		RF 1-0	RF 1-0
2	TTL		RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0
4	TTL		RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0
6	TTL		RF 6-0	RF 6-0
7	TTL		RF 7-0	RF 7-0
8	TTL		RF 8-0	RF 8-0
9	TTL		RF 9-0	RF 9-0
10	TTL		-	RF 10-0
11	VDC		-	-
12	GND		-	-
13	Ind.1	Indicators	RF 1-0	RF 1-0
14	Ind.2		RF 2-0	RF 2-0
15	Ind.3		RF 3-0	RF 3-0
16	Ind.4		RF 4-0	RF 4-0
17	Ind.5		RF 5-0	RF 5-0
18	Ind.6		RF 6-0	RF 6-0
19	Ind.7		RF 7-0	RF 7-0
20	Ind.8		RF 8-0	RF 8-0
21	Ind.9		RF 9-0	RF 9-0
22	Ind.10		-	RF 10-0
23	Ind.com		-	-
24~26	N/A		-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		S	N			W			S	
Standard Series	9:SP9T K:SP10T	SMA	Normally Open	06:DC~6GHz 08:DC~8GHz 12:DC~12.4GHz 18:DC~18GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6.Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	2:D-Sub 15 Male (3 rows) 5:D-Sub 26 Male (3 rows)

★ EXP：E9SN0605W00S2：Standard Series、SP9T、SMA、Normally Open、DC~6GHz、5V、Non Terminated 、Negative common、Standard 、Normal、 D-Sub 15 Male.

SP9T-10T 26.5GHz
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.6	50	1.6	50
18-26.5	0.7	50	1.7	15

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

⋆ It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

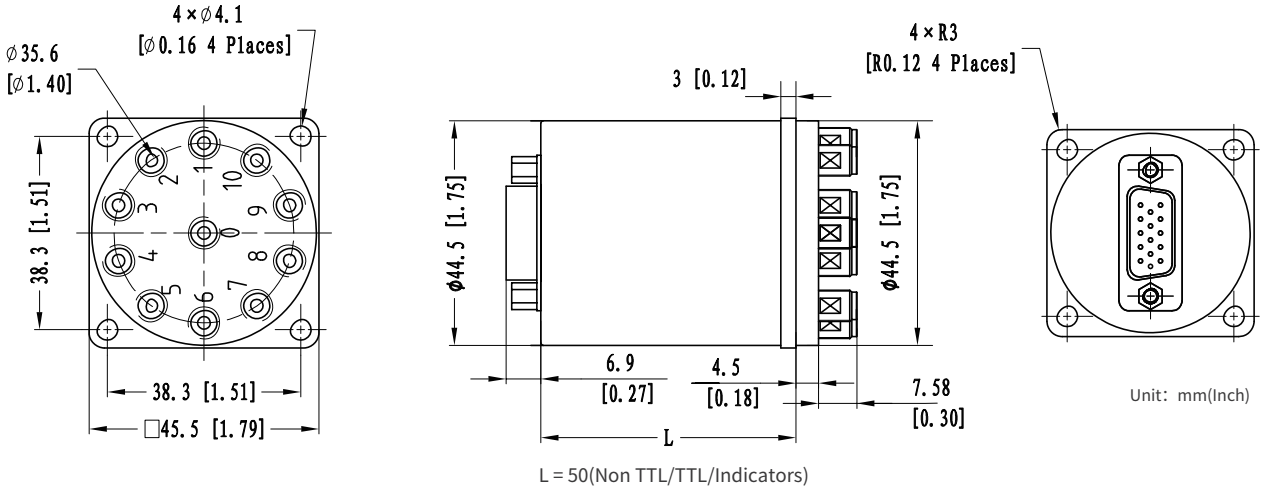
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

⋆ Connect VDC &GND before the function operates

◆ Product Functions

- DC to 26.5GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

◆ Outline Drawing



L = 50(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

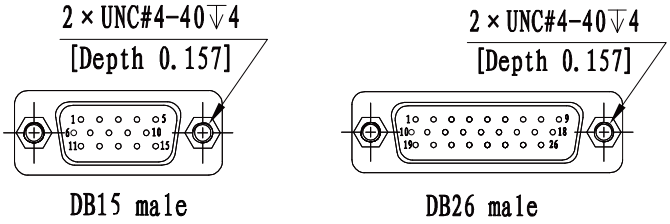
Impedance: 50Ω

Actuator Terminals: D-SUB 15/26Pin Male

Weight: 185g

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS



◆ Truth Table

* No indication function, control interface DB15 Male.

Normally open Non TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP9T	SP10T
1	V1		RF 1-0	RF 1-0
2	V2		RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0
4	V4		RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0
6	V6		RF 6-0	RF 6-0
7	V7		RF 7-0	RF 7-0
8	V8		RF 8-0	RF 8-0
9	V9		RF 9-0	RF 9-0
10	V10		-	RF 10-0
11	GND		-	-
12	Ind.1	Indicators	RF 1-0	RF 1-0
13	Ind.2		RF 2-0	RF 2-0
14	Ind.3		RF 3-0	RF 3-0
15	Ind.4		RF 4-0	RF 4-0
16	Ind.5		RF 5-0	RF 5-0
17	Ind.6		RF 6-0	RF 6-0
18	Ind.7		RF 7-0	RF 7-0
19	Ind.8		RF 8-0	RF 8-0
20	Ind.9		RF 9-0	RF 9-0
21	Ind.10		-	RF 10-0
22	Ind.com		-	-
23	VDC		-	-
24~26	N/A		-	-

Normally open TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP9T	SP10T
1	TTL		RF 1-0	RF 1-0
2	TTL		RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0
4	TTL		RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0
6	TTL		RF 6-0	RF 6-0
7	TTL		RF 7-0	RF 7-0
8	TTL		RF 8-0	RF 8-0
9	TTL		RF 9-0	RF 9-0
10	TTL		-	RF 10-0
11	VDC		-	-
12	GND		-	-
13	Ind.1	Indicators	RF 1-0	RF 1-0
14	Ind.2		RF 2-0	RF 2-0
15	Ind.3		RF 3-0	RF 3-0
16	Ind.4		RF 4-0	RF 4-0
17	Ind.5		RF 5-0	RF 5-0
18	Ind.6		RF 6-0	RF 6-0
19	Ind.7		RF 7-0	RF 7-0
20	Ind.8		RF 8-0	RF 8-0
21	Ind.9		RF 9-0	RF 9-0
22	Ind.10		-	RF 10-0
23	Ind.com		-	-
24~26	N/A		-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		S	N	26		W			S	
Standard Series	9:SP9T K:SP10T	SMA	Normally Open	DC~26.5GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6.Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	2:D-Sub 15 Male (3 rows) 5:D-Sub 26 Male (3 rows)

★ EXP：E9SN2605W00S2：Standard Series、SP9T、SMA、Normally Open、DC~26.5GHz、5V、Non Terminated 、Negative common、Standard D-Sub15 Male.

SP11T-12T 18GHz
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.6	50	1.6	50

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

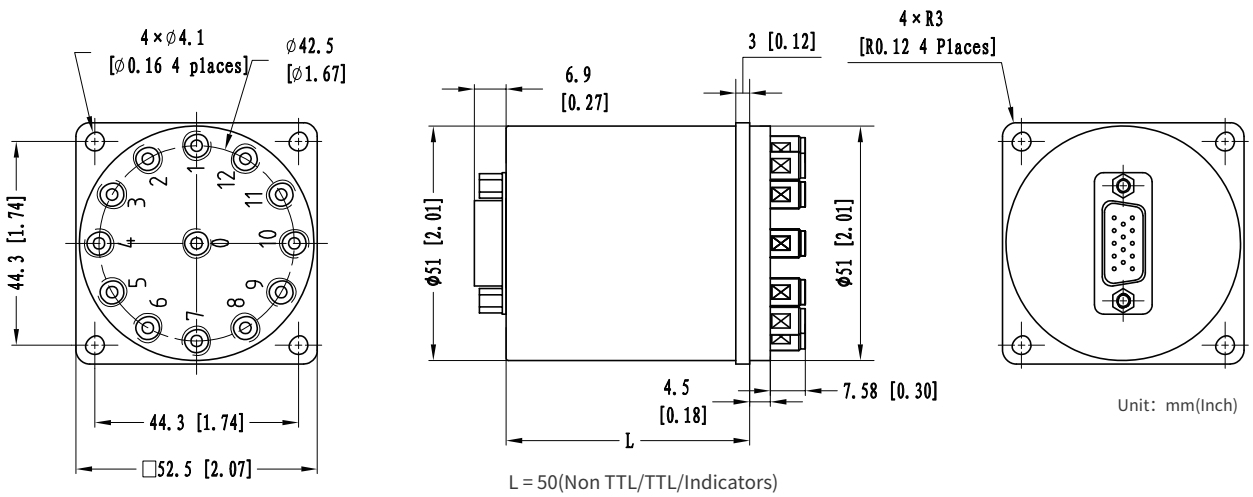
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 18GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

◆ Outline Drawing



L = 50(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

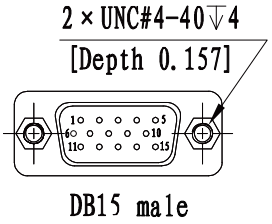
Impedance: 50Ω

Actuator Terminals: D-SUB 15Pin Male

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Weight: 225g



◆ Truth Table

Normally open Non TTL			
Actuator Terminals D-SUB 15Pin Male		RF Connector	
Pin No.	Define	SP11T	SP12T
1	V1	RF 1-0	RF 1-0
2	V2	RF 2-0	RF 2-0
3	V3	RF 3-0	RF 3-0
4	V4	RF 4-0	RF 4-0
5	V5	RF 5-0	RF 5-0
6	V6	RF 6-0	RF 6-0
7	V7	RF 7-0	RF 7-0
8	V8	RF 8-0	RF 8-0
9	V9	RF 9-0	RF 9-0
10	V10	RF 10-0	RF 10-0
11	V11	RF 11-0	RF 11-0
12	V12	-	RF 12-0
13	GND	-	-
14~15	N/A	-	-

Normally open TTL			
Actuator Terminals D-SUB 15Pin Male		RF Connector	
Pin No.	Define	SP11T	SP12T
1	TTL	RF 1-0	RF 1-0
2	TTL	RF 2-0	RF 2-0
3	TTL	RF 3-0	RF 3-0
4	TTL	RF 4-0	RF 4-0
5	TTL	RF 5-0	RF 5-0
6	TTL	RF 6-0	RF 6-0
7	TTL	RF 7-0	RF 7-0
8	TTL	RF 8-0	RF 8-0
9	TTL	RF 9-0	RF 9-0
10	TTL	RF 10-0	RF 10-0
11	TTL	RF 11-0	RF 11-0
12	TTL	-	RF 12-0
13	VDC	-	-
14	GND	-	-
15	N/A	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		S	N			W			S	2
Standard Series	L:SP11T M:SP12T	SMA	Normally Open	06:DC~6GHz 08:DC~8GHz 12:DC~12.4GHz 18:DC~18GHzz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6.Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	D-Sub 15 Male (3 rows)

★ EXP：ELSN0605W00S2：Standard Series、SP11T、SMA、Normally Open、DC~6GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

DPDT 18GHz
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.5	55	1.5	50

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	350	200	180
	Latching	400	200	185

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

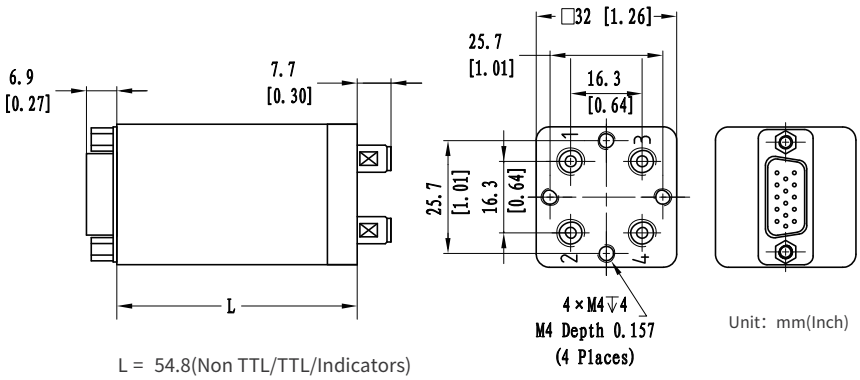
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 18GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

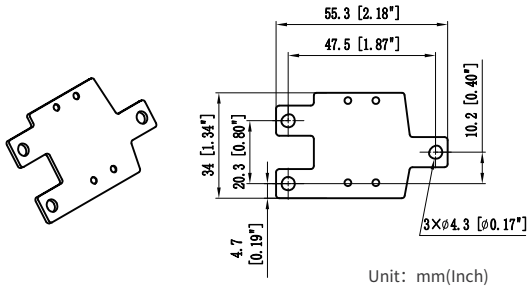
◆ Outline Drawing



L = 54.8(Non TTL/TTL/Indicators)

Unit: mm(Inch)

◆ Backplane



Unit: mm(Inch)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

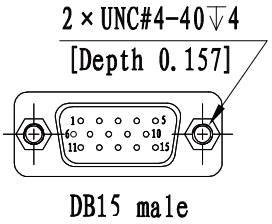
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15Pin Male

Weight: 100g



◆ Truth Table

Failsafe Non TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-2,3-4
1	GND		-
2	V		RF 1-3,2-4
3~11	N/A		-
12	VDC	Indicators	-
13	Ind.1		RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Failsafe TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-2,3-4
1	VDC		-
2	GND		-
3	TTL		RF 1-3,2-4
4~12	N/A		-
13	Ind.1	Indicators	RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Latching Non TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-2,3-4
2	V2		RF 1-3,2-4
3	GND		-
4~11	N/A		-
12	VDC	Indicators	-
13	Ind.1		RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Latching TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		-
1	VDC		-
2	GND		-
3	TTL		RF 1-2,3-4
4	TTL		RF 1-3,2-4
5~12	N/A		-
13	Ind.1	Indicators	RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	D	S				W				2
Standard Series	DPDT	SMA	L:Latching F:Failsafe	06:DC~6GHz 08:DC~8GHz 12:DC~12.4GHz 18:DC~18GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S:Normal B:Backplane	D-Sub 15 Male (3 rows)

★ EXP：EDSL0605W00S2：Standard Series、DPDT、SMA、Latching、DC~6GHz、5V、Non Terminated、Negative common、Standard、Normal、D-Sub 15 Male.

DPDT 26.5GHz
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.5	55	1.5	50
18-26.5	0.7	50	1.7	15

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	350	200	180
	Latching	400	200	185

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

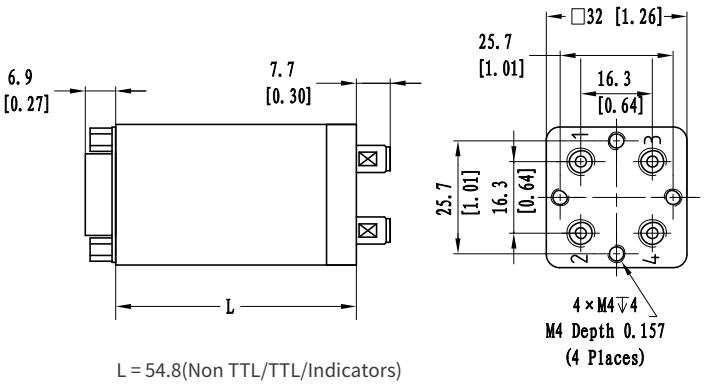
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

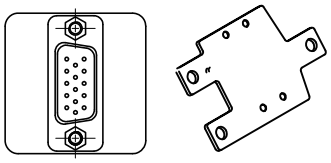
◆ Product Functions

- DC to 26.5GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

◆ Outline Drawing

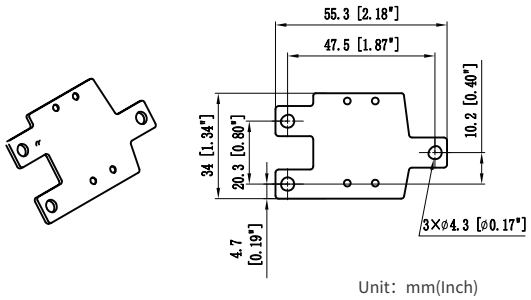


L = 54.8(Non TTL/TTL/Indicators)



Unit: mm(Inch)

◆ Backplane



Unit: mm(Inch)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

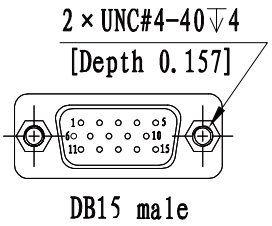
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15Pin Male

Weight: 100g



◆ Truth Table

Failsafe Non TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-2,3-4
1	GND		-
2	V		RF 1-3,2-4
3~11	N/A		-
12	VDC	Indicators	-
13	Ind.1		RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Failsafe TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-2,3-4
1	VDC		-
2	GND		-
3	TTL		RF 1-3,2-4
4~12	N/A		-
13	Ind.1	Indicators	RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Latching Non TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-2,3-4
2	V2		RF 1-3,2-4
3	GND		-
4~11	N/A		-
12	VDC	Indicators	-
13	Ind.1		RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Latching TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		-
1	VDC		-
2	GND		-
3	TTL		RF 1-2,3-4
4	TTL		RF 1-3,2-4
5~12	N/A		-
13	Ind.1	Indicators	RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	D	S		26		W				2
Standard Series	DPDT	SMA	L:Latching F:Failsafe	DC~26.5GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S:Normal B:Backplane	D-Sub 15 Male (3 rows)

★ EXP：EDSL2605W00S2：Standard Series、DPDT、SMA、Latching、DC~26.5GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

DPDT 40GHz
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	70	1.4	30
12-18	0.5	55	1.5	25
18-26.5	0.7	50	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	350	200	180
	Latching	400	200	185

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

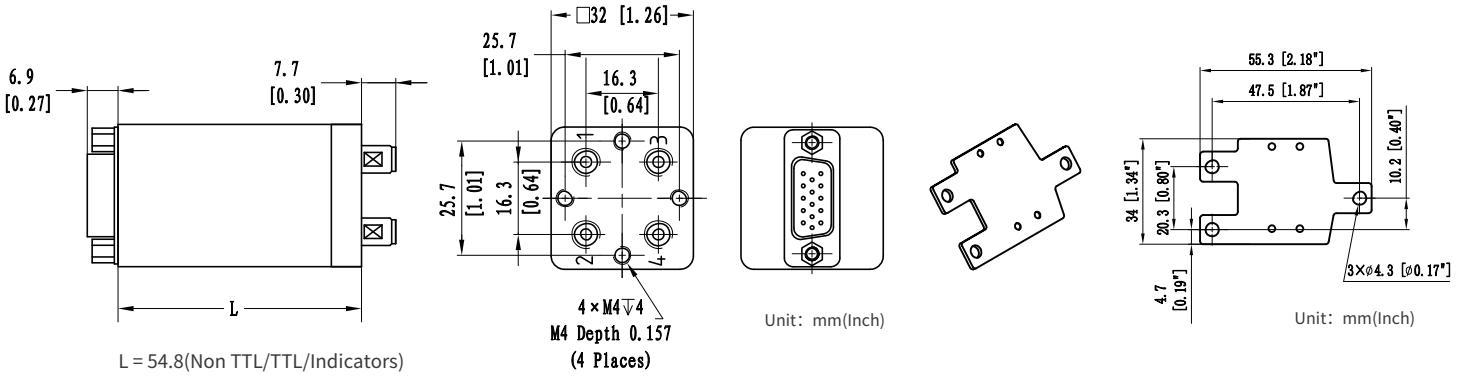
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 40GHz
- Low loss, Low VSWR, High Isolation
- 2.92 Connector
- Selectable TTL driver control

◆ Outline Drawing



◆ Backplane

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 2.92 Female

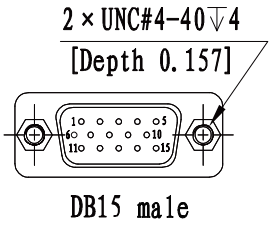
Impedance: 50Ω

Actuator Terminals: D-SUB 15Pin Male

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Weight: 100g



◆ Truth Table

Failsafe Non TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-2,3-4
1	GND		-
2	V		RF 1-3,2-4
3~11	N/A		-
12	VDC	Indicators	-
13	Ind.1		RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Failsafe TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-2,3-4
1	VDC		-
2	GND		-
3	TTL		RF 1-3,2-4
4~12	N/A		-
13	Ind.1	Indicators	RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Latching Non TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-2,3-4
2	V2		RF 1-3,2-4
3	GND		-
4~11	N/A		-
12	VDC	Indicators	-
13	Ind.1		RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Latching TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		-
1	VDC		-
2	GND		-
3	TTL		RF 1-2,3-4
4	TTL		RF 1-3,2-4
5~12	N/A		-
13	Ind.1	Indicators	RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	D	K		40		W				2

- Series: E — Standard Series
- Number Of Positions: D — DPDT
- Rf Connectors: K — 2.92mm
- Type: L:Latching; F:Failsafe
- Frequency: 40 — DC~40GHz
- Actuator Voltage: 05:5V; 12:12V; 24:24V; 28:28V
- Terminated: W — Non Terminated
- Driver: 0:Negative common; 1:TTL Driver; 2:Positive Common; 3:Self Cutoff; 4:Negative common And Indicators; 5:TTL driver And Indicators; 6:Positive Common And Indicators
- Operating Temperature: 0:Standard (-25°C~65°C); 1:Extended1 (-45°C~85°C); 2:Extended2 (-55°C~85°C)
- Install: S:Normal; B:Backplane
- Control connector: 2 — D-Sub 15 Male (3 rows)

★ EXP：EDKL4005W00S2-：Standard Series、DPDT、2.92mm、Latching、DC~40GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

DPDT 43.5GHz
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	70	1.4	30
12-18	0.5	60	1.5	25
18-26.5	0.7	55	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5
40-43.5	1.0	50	2.0	4

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	350	200	180
	Latching	400	200	185

⋆ It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

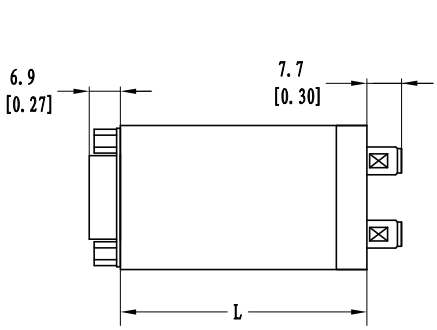
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

⋆ Connect VDC &GND before the function operates

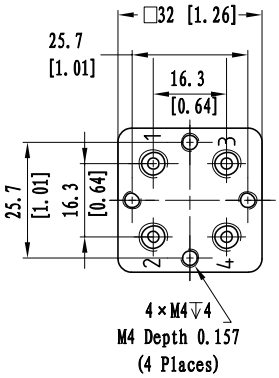
◆ Product Functions

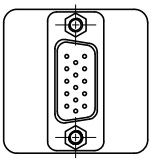
- DC to 43.5GHz
- Low loss, Low VSWR, High Isolation
- 2.92 Connector
- Selectable TTL driver control

◆ Outline Drawing



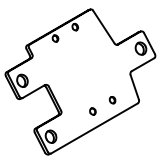
L = 54.8(Non TTL/TTL/Indicators)

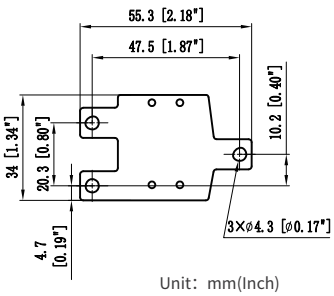




Unit: mm(Inch)

◆ Backplane





Unit: mm(Inch)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 2.92 Female

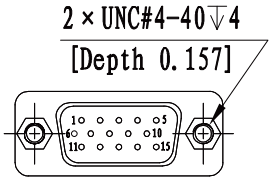
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15Pin Male

Weight: 100g



◆ Truth Table

Failsafe Non TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-2,3-4
1	GND		-
2	V		RF 1-3,2-4
3~11	N/A		-
12	VDC	Indicators	-
13	Ind.1		RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Failsafe TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-2,3-4
1	VDC		-
2	GND		-
3	TTL		RF 1-3,2-4
4~12	N/A		-
13	Ind.1	Indicators	RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Latching Non TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-2,3-4
2	V2		RF 1-3,2-4
3	GND		-
4~11	N/A		-
12	VDC	Indicators	-
13	Ind.1		RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Latching TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		-
1	VDC		-
2	GND		-
3	TTL		RF 1-2,3-4
4	TTL		RF 1-3,2-4
5~12	N/A		-
13	Ind.1	Indicators	RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	D	K		43		W				2
Standard Series	DPDT	2.92mm	L:Latching F:Failsafe	DC~43.5GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S:Normal B:Backplane	D-Sub 15 Male (3 rows)

★ EXP：EDKL4305W00S2：Standard Series、DPDT、2.92mm、Latching、DC~43.5GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

DPDT 50GHz
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	70	1.4	30
12-18	0.5	60	1.5	25
18-26.5	0.7	55	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5
40-43	1.0	50	2.0	4
43-50	1.2	50	2.1	3

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	350	200	180
	Latching	400	200	185

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

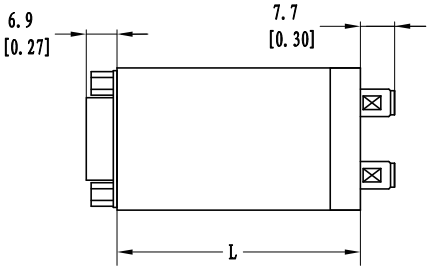
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

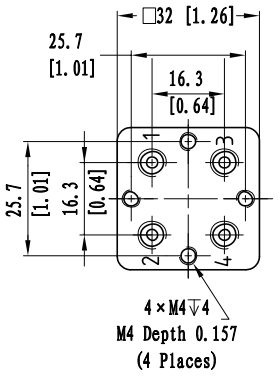
◆ Product Functions

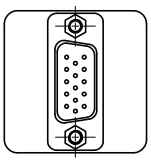
- DC to 50GHz
- Low loss, Low VSWR, High Isolation
- 1.85 Connector
- Selectable TTL driver control

◆ Outline Drawing



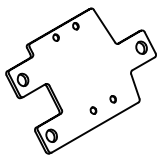
L = 54.8(Non TTL/TTL/Indicators)

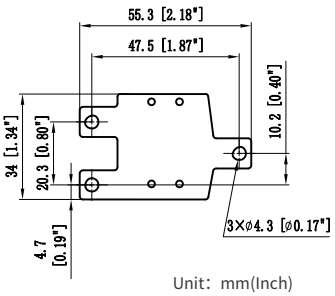




Unit: mm(Inch)

◆ Backplane





Unit: mm(Inch)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 1.85 Female

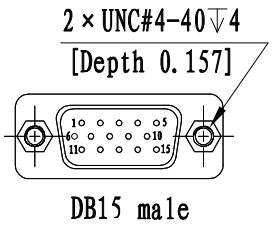
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15Pin Male

Weight: 100g



◆ Truth Table

Failsafe Non TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-2,3-4
1	GND		-
2	V		RF 1-3,2-4
3~11	N/A		-
12	VDC	Indicators	-
13	Ind.1		RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Failsafe TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-2,3-4
1	VDC		-
2	GND		-
3	TTL		RF 1-3,2-4
4~12	N/A		-
13	Ind.1	Indicators	RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Latching Non TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-2,3-4
2	V2		RF 1-3,2-4
3	GND		-
4~11	N/A		-
12	VDC	Indicators	-
13	Ind.1		RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Latching TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		-
1	VDC		-
2	GND		-
3	TTL		RF 1-2,3-4
4	TTL		RF 1-3,2-4
5~12	N/A		-
13	Ind.1	Indicators	RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	D	5		50		W				2
Standard Series	DPDT	1.85mm	L:Latching F:Failsafe	DC~50GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S:Normal B:Backplane	D-Sub 15 Male (3 rows)

★ EXP：ED5L5005W00S2：Standard Series、DPDT、1.85mm、Latching、DC~50GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

DPDT 53GHz
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.2	50
6-12	0.4	70	1.3	40
12-18	0.5	60	1.3	40
18-26.5	0.7	55	1.4	20
26.5-32	0.8	50	1.4	20
32-40	0.9	50	1.7	10
40-43	1.0	50	1.7	10
43-50	1.2	50	1.8	5
50-53	1.5	50	1.8	5

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	350	200	180
	Latching	400	200	185

⋆ It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

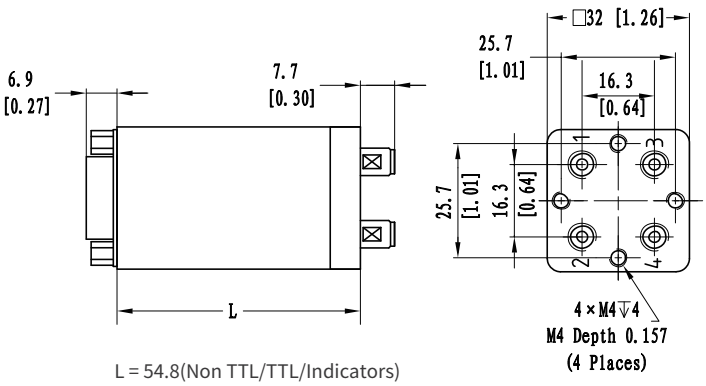
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

⋆ Connect VDC &GND before the function operates

◆ Product Functions

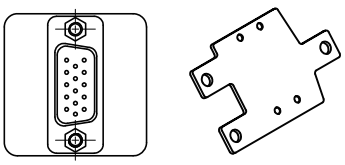
- DC to 53GHz
- Low loss, Low VSWR, High Isolation
- 1.85 Connector
- Selectable TTL driver control

◆ Outline Drawing

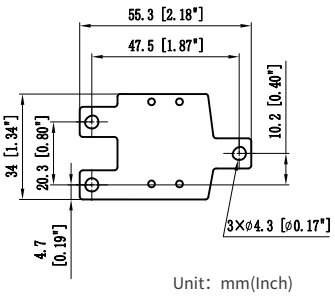


L = 54.8(Non TTL/TTL/Indicators)

◆ Backplane



Unit: mm(Inch)



Unit: mm(Inch)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 1.85 Female

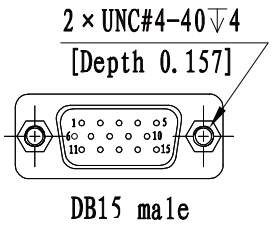
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15Pin Male

Weight: 100g



◆ Truth Table

Failsafe Non TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-2,3-4
1	GND		-
2	V		RF 1-3,2-4
3~11	N/A		-
12	VDC	Indicators	-
13	Ind.1		RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Failsafe TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-2,3-4
1	VDC		-
2	GND		-
3	TTL		RF 1-3,2-4
4~12	N/A		-
13	Ind.1	Indicators	RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Latching Non TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-2,3-4
2	V2		RF 1-3,2-4
3	GND		-
4~11	N/A		-
12	VDC	Indicators	-
13	Ind.1		RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Latching TTL			
Actuator Terminals D-SUB 15Pin Male			RF Connector
Pin No.	Define		-
1	VDC		-
2	GND		-
3	TTL		RF 1-2,3-4
4	TTL		RF 1-3,2-4
5~12	N/A		-
13	Ind.1	Indicators	RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	D	5		53		W				2
Standard Series	DPDT	1.85mm	L:Latching F:Failsafe	DC~53GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S:Normal B:Backplane	D-Sub 15 Male (3 rows)

★ EXP：ED5L5305W00S2：Standard Series、DPDT、1.85mm、Latching、DC~53GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

SPDT 18GHz
Terminated
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.5	55	1.5	50

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	350	200	180
	Latching	400	200	180

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	20mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

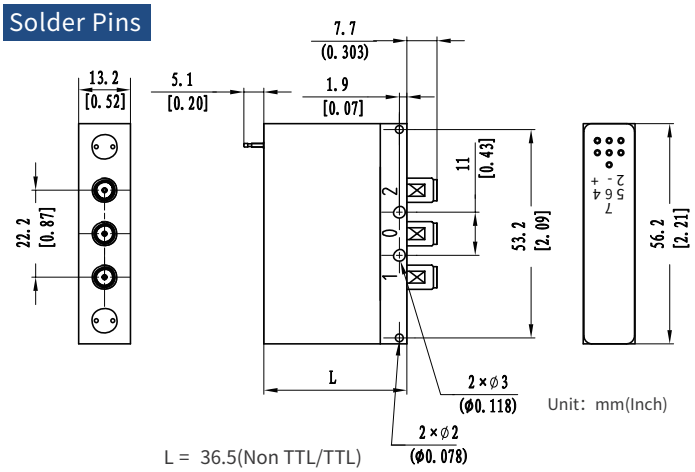
* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 18GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

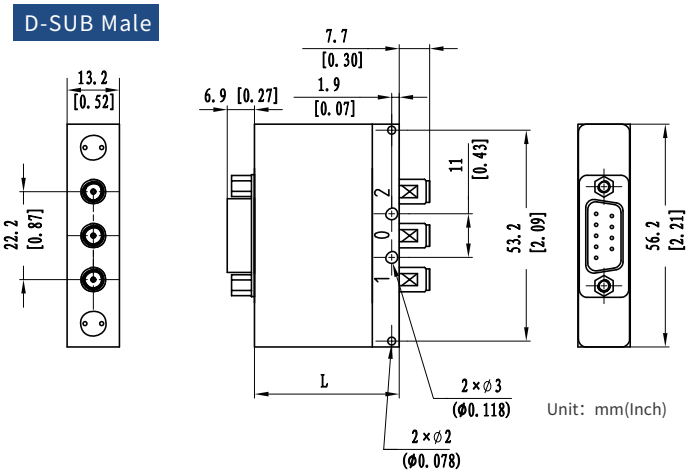
◆ Outline Drawing

Solder Pins



L = 36.5(Non TTL/TTL)
L = 42.5(Indicators)

D-SUB Male



L = 55.7(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

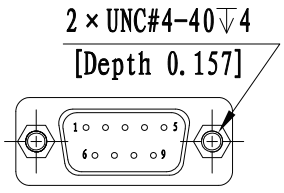
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 9Pin Male

Weight: 70g



DB9 male

◆ Truth Table

Failsafe Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	V		RF 2-0
2	N/A		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Failsafe TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	VDC		RF 2-0
2	TTL		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7~9	N/A		-

Latching Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-0
2	V2		RF 2-0
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Latching TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	VDC		
2	TTL		RF 1-0
3	GND		-
4	TTL		RF 2-0
5	Ind.1	Indicators	RF 1-0
6	Ind.2		RF 2-0
7	Ind.com		-
8~9	N/A		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	2	S				T			S	
Standard Series	SP2T	SMA	L:Latching F:Failsafe	06:DC~6GHz 08:DC~8GHz 12:DC~12.4GHz 18:DC~18GHz	05:5V 12:12V 24:24V 28:28V	Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 1:D-Sub 9 Male (2 rows)

★ EXP：E2SL0605T00S0：Standard Series、SP2T、SMA、Latching、DC~6GHz、5V、Terminated 、Negative common、Standard 、Normal、Solder Pins.

SPDT 26.5GHz
Terminated
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.5	55	1.5	50
18-26.5	0.6	50	1.6	15

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	350	200	180
	Latching	400	200	180

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	20mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

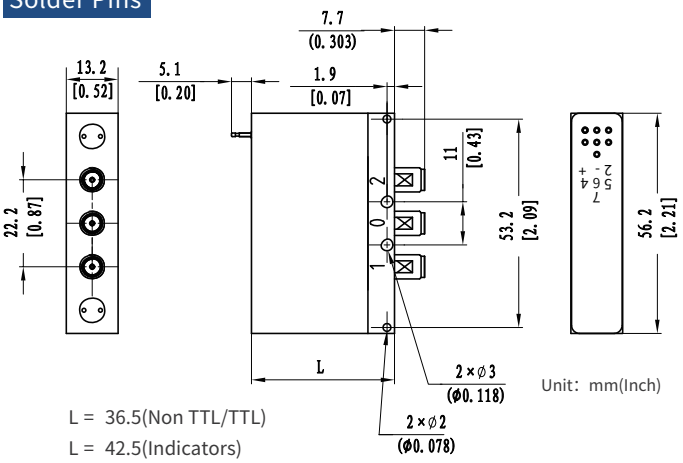
* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 26.5GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

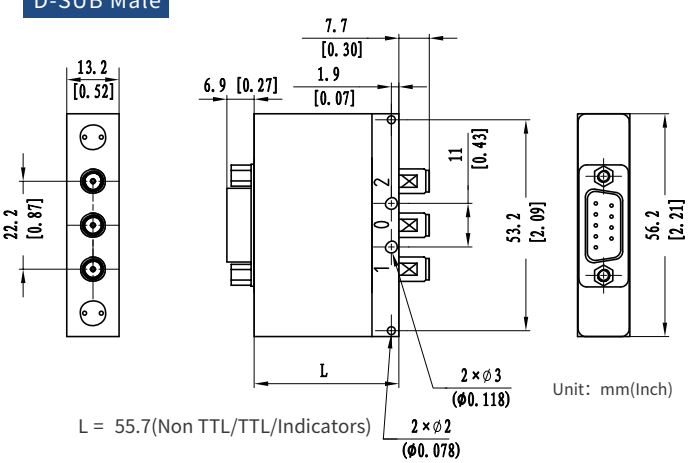
◆ Outline Drawing

Solder Pins



L = 36.5(Non TTL/TTL)
L = 42.5(Indicators)

D-SUB Male



L = 55.7(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

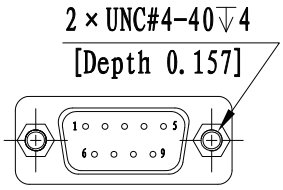
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 9Pin Male

Weight: 70g



DB9 male

◆ Truth Table

Failsafe Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	V		RF 2-0
2	N/A		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Failsafe TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	VDC		RF 2-0
2	TTL		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7~9	N/A		-

Latching Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-0
2	V2		RF 2-0
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Latching TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	VDC		
2	TTL		RF 1-0
3	GND		-
4	TTL		RF 2-0
5	Ind.1	Indicators	RF 1-0
6	Ind.2		RF 2-0
7	Ind.com		-
8~9	N/A		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	2	S		26		T			S	
Standard Series	SP2T	SMA	L:Latching F:Failsafe	DC~26.5GHz	05:5V 12:12V 24:24V 28:28V	Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 1:D-Sub 9 Male (2 rows)

★ EXP：E2SL2605T00S0：Standard Series、SP2T、SMA、Latching、DC~26.5GHz、5V、Terminated 、Negative common、Standard 、Normal、Solder Pins.

SPDT 40GHz
Terminated
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	60	1.4	30
12-18	0.5	55	1.5	25
18-26.5	0.6	50	1.6	12
26.5-32	0.7	50	1.7	8
32-40	0.9	50	1.9	5

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	350	200	180
	Latching	400	200	185

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	20mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

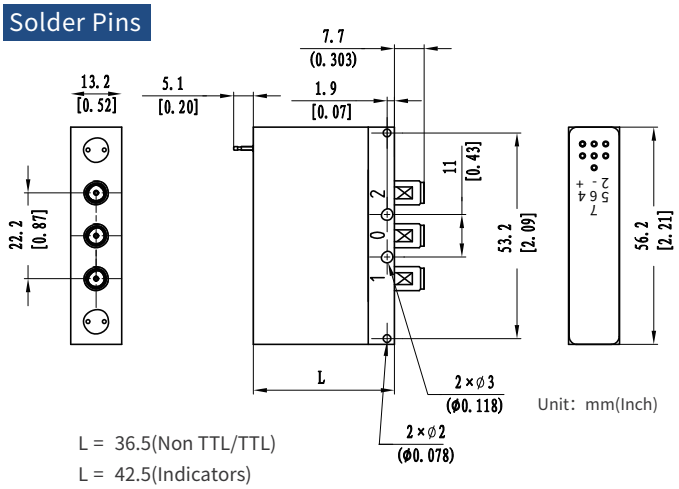
* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 40GHz
- Low loss, Low VSWR, High Isolation
- 2.92 Connector
- Selectable TTL driver control

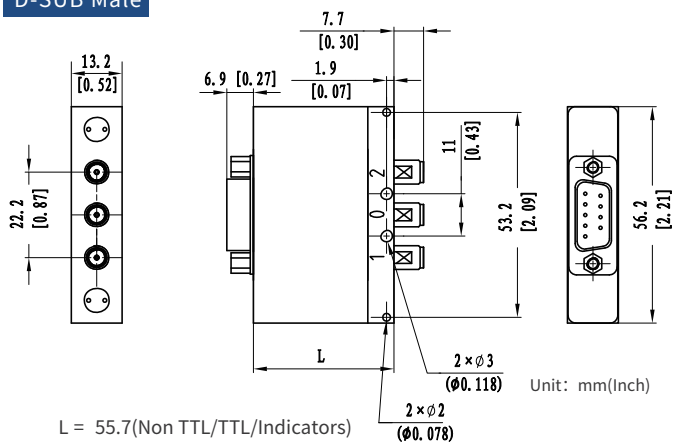
◆ Outline Drawing

Solder Pins



L = 36.5(Non TTL/TTL)
L = 42.5(Indicators)

D-SUB Male



L = 55.7(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 2.92 Female

Impedance: 50Ω

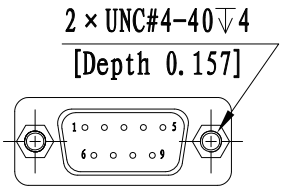
控制接口：插针/D-SUB 9Pin Male

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Terminals: Solder Pins/D-SUB 9Pin Male

Weight: 70g



DB9 male

◆ Truth Table

Failsafe Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	V		RF 2-0
2	N/A		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Failsafe TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	VDC		RF 2-0
2	TTL		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7~9	N/A		-

Latching Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-0
2	V2		RF 2-0
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Latching TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	VDC		
2	TTL		RF 1-0
3	GND		-
4	TTL		RF 2-0
5	Ind.1	Indicators	RF 1-0
6	Ind.2		RF 2-0
7	Ind.com		-
8~9	N/A		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	2	K		40		T			S	
Standard Series	SP2T	2.92mm	L:Latching F:Failsafe	DC~40GHz	05:5V 12:12V 24:24V 28:28V	Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 1:D-Sub 9 Male (2 rows)

★ EXP：E2KL4005T00S0：Standard Series、SP2T、2.92mm、Latching、DC~40GHz、5V、Terminated、Negative common、Standard、Normal、Solder Pins.

SPDT 43.5GHz
Terminated
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	70	1.4	30
12-18	0.5	60	1.5	25
18-26.5	0.7	55	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5
40-43.5	1.0	50	2.0	4

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	350	200	180
	Latching	400	200	185

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	20mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

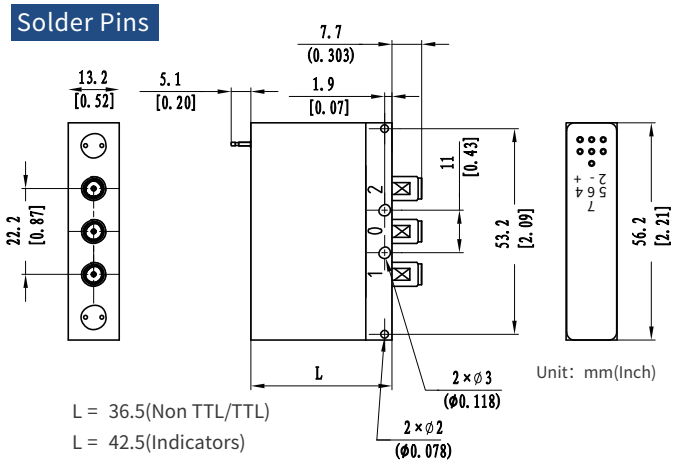
* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 43.5GHz
- Low loss, Low VSWR, High Isolation
- 2.92 Connector
- Selectable TTL driver control

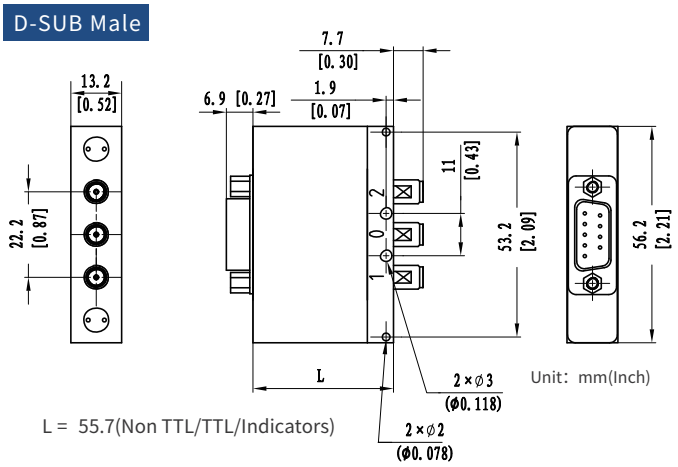
◆ Outline Drawing

Solder Pins



L = 36.5(Non TTL/TTL)
L = 42.5(Indicators)

D-SUB Male



L = 55.7(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 2.92 Female

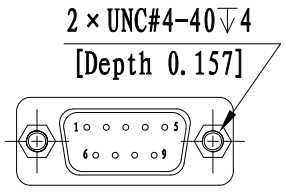
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 9Pin Male

Weight: 70g



DB9 male

◆ Truth Table

Failsafe Non TTL			
Actuator Terminals / Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	V		RF 2-0
2	N/A		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Failsafe TTL			
Actuator Terminals / Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	VDC		RF 2-0
2	TTL		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7~9	N/A		-

Latching Non TTL			
Actuator Terminals / Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-0
2	V2		RF 2-0
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Latching TTL			
Actuator Terminals / Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	VDC		
2	TTL		RF 1-0
3	GND		-
4	TTL		RF 2-0
5	Ind.1	Indicators	RF 1-0
6	Ind.2		RF 2-0
7	Ind.com		-
8~9	N/A		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	2	K		43		T			S	
Standard Series	SP2T	2.92mm	L:Latching F:Failsafe	DC~43.5GHz	05:5V 12:12V 24:24V 28:28V	Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 1:D-Sub 9 Male (2 rows)

★ EXP：E2KL4305T00S0：Standard Series、SP2T、2.92mm、Latching、DC~43.5GHz、5V、Terminated 、Negative common、Standard 、Normal、Solder Pins.

SPDT 50GHz
Terminated
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	60	1.4	30
12-18	0.5	55	1.5	25
18-26.5	0.6	50	1.6	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5
40-43	1.0	50	2.0	4
43-50	1.1	50	2.1	3

◆ Product Functions

- DC to 50GHz
- Low loss, Low VSWR, High Isolation
- 1.85 Connector
- Selectable TTL driver control

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	350	200	180
	Latching	400	200	185

* It can be selected according to user requirements

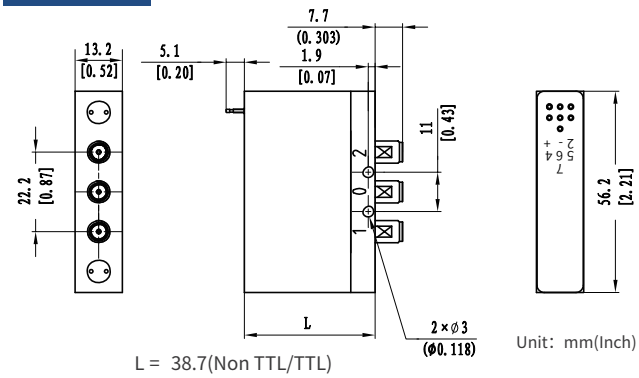
TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	20mA

Indicators 指示端	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Outline Drawing

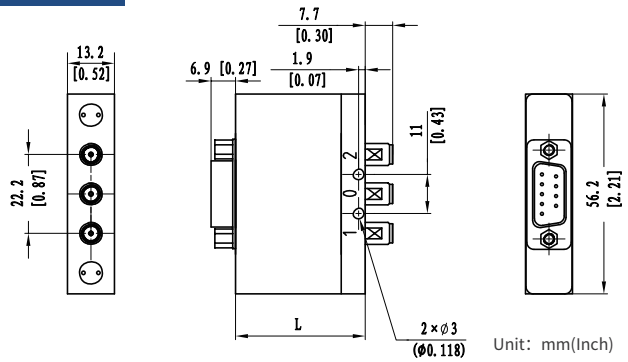
Solder Pins



Unit: mm(Inch)

L = 38.7(Non TTL/TTL)
L = 42.7(Indicators)

D-SUB Male



Unit: mm(Inch)

L = 55.9(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 1.85 Female

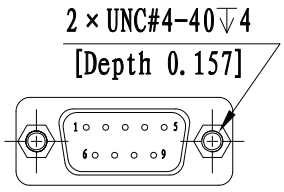
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 9Pin Male

Weight: 75g



DB9 male

◆ Truth Table

Failsafe Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	V		RF 2-0
2	N/A		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Failsafe TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	VDC		RF 2-0
2	TTL		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7~9	N/A		-

Latching Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-0
2	V2		RF 2-0
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Latching TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	VDC		
2	TTL		RF 1-0
3	GND		-
4	TTL		RF 2-0
5	Ind.1	Indicators	RF 1-0
6	Ind.2		RF 2-0
7	Ind.com		-
8~9	N/A		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	2	5		50		T			S	
Standard Series	SP2T	1.85mm	L:Latching F:Failsafe	DC~50GHz	05:5V 12:12V 24:24V 28:28V	Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 1:D-Sub 9 Male (2 rows)

★ EXP：E25L5005T00S0：Standard Series、SP2T、1.85mm、Latching、DC~50GHz、5V、Terminated、Negative common、Standard、Normal、Solder Pins.

SPDT 53GHz
Terminated
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	60	1.4	30
12-18	0.5	55	1.5	25
18-26.5	0.6	50	1.6	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5
40-43	1.0	50	2.0	4
43-50	1.1	50	2.1	3
50-53	1.2	50	2.2	2

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	350	200	180
	Latching	400	200	185

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	20mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

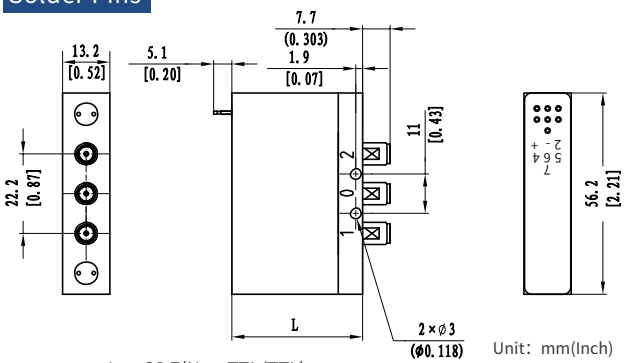
* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 53GHz
- Low loss, Low VSWR, High Isolation
- 1.85 Connector
- Selectable TTL driver control

◆ Outline Drawing

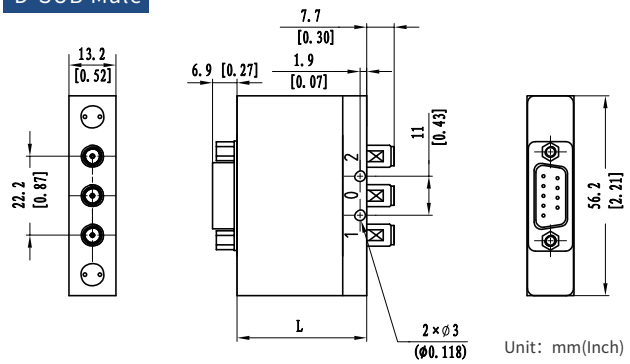
Solder Pins



Unit: mm(Inch)

L = 38.7(Non TTL/TTL)
L = 42.7(Indicators)

D-SUB Male



Unit: mm(Inch)

L = 55.9(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 1.85 Female

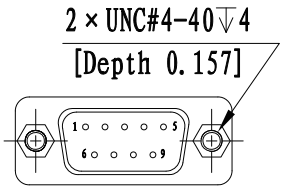
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 9Pin Male

Weight: 75g



DB9 male

◆ Truth Table

Failsafe Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	V		RF 2-0
2	N/A		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Failsafe TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	VDC		RF 2-0
2	TTL		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7~9	N/A		-

Latching Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-0
2	V2		RF 2-0
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Latching TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	VDC		
2	TTL		RF 1-0
3	GND		-
4	TTL		RF 2-0
5	Ind.1	Indicators	RF 1-0
6	Ind.2		RF 2-0
7	Ind.com		-
8~9	N/A		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	2	5		53		T			S	
Standard Series	SP2T	1.85mm	L:Latching F:Failsafe	DC~53GHz	05:5V 12:12V 24:24V 28:28V	Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 1:D-Sub 9 Male (2 rows)

★ EXP：E25L5305T00S0：Standard Series、SP2T、1.85mm、Latching、DC~53GHz、5V、Terminated 、Negative common、Standard 、Normal、Solder Pins.

SPDT 67GHz
Terminated
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	60	1.4	30
12-18	0.5	55	1.5	25
18-26.5	0.6	50	1.6	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5
40-43	1.0	50	2.0	4
43-50	1.1	50	2.1	3
50-53	1.2	50	2.2	2
53-67	1.2	45	2.2	2

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	350	200	180
	Latching	400	200	185

* It can be selected according to user requirements

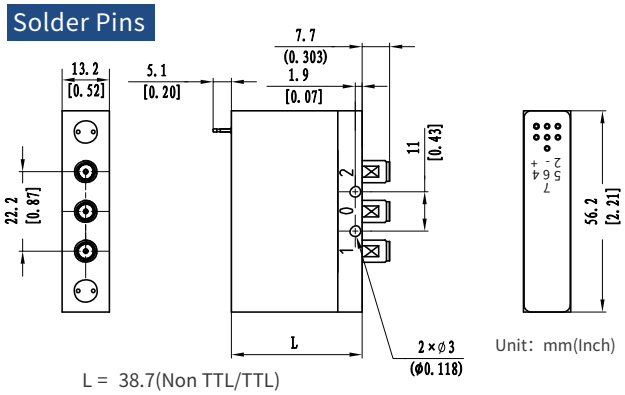
TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	20mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

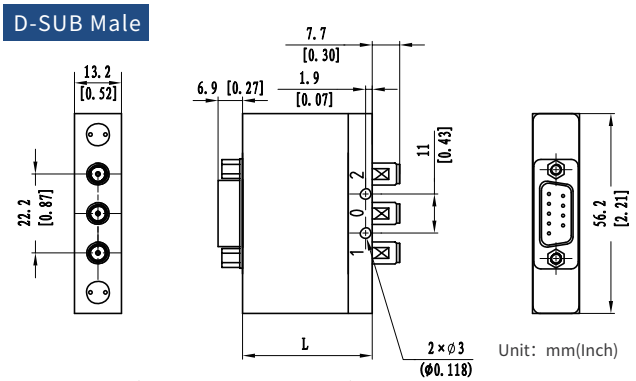
◆ Outline Drawing

Solder Pins



L = 38.7(Non TTL/TTL)
L = 42.7(Indicators)

D-SUB Male



L = 55.9(Non TTL/TTL/Indicators)

◆ Product Functions

- DC to 67GHz
- Low loss, Low VSWR, High Isolation
- 1.85 Connector
- Selectable TTL driver control

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 1.85 Female

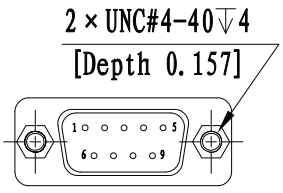
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 9Pin Male

Weight: 75g



DB9 male

◆ Truth Table

Failsafe Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	V		RF 2-0
2	N/A		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Failsafe TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	VDC		RF 2-0
2	TTL		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7~9	N/A		-

Latching Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-0
2	V2		RF 2-0
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Latching TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	VDC		
2	TTL		RF 1-0
3	GND		-
4	TTL		RF 2-0
5	Ind.1	Indicators	RF 1-0
6	Ind.2		RF 2-0
7	Ind.com		-
8~9	N/A		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	2	5		67		T			S	
Standard Series	SP2T	1.85mm	L:Latching F:Failsafe	DC~67GHz	05:5V 12:12V 24:24V 28:28V	Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 1:D-Sub 9 Male (2 rows)

★EXP：E25L6705T00S0：Standard Series、SP2T、1.85mm、Latching、DC~67GHz、5V、Terminated 、Negative common、Standard 、Normal、Solder Pins.

SP3T-6T 18GHz
Terminated
Normally open/Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.5	50	1.5	50

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	200	180
	Latching	320	200	180
	Latching(RESET)	1920	1200	1080

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

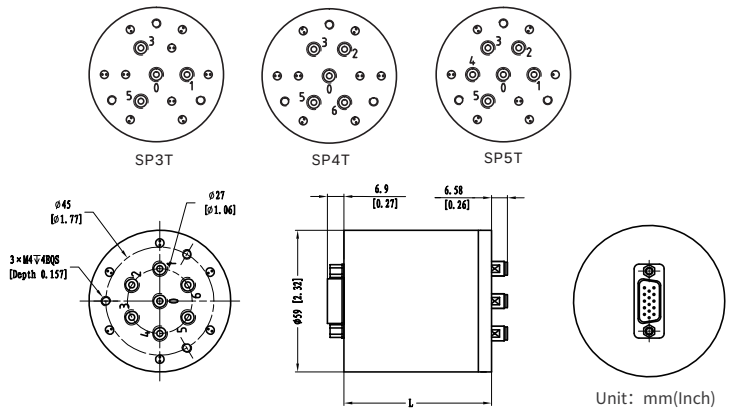
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

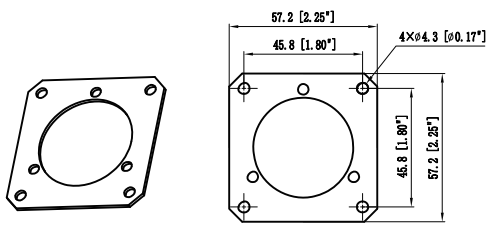
- DC to 18GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

◆ Outline Drawing



L = 61.5(Non TTL/TTL/Indicators)

◆ Backplane



◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

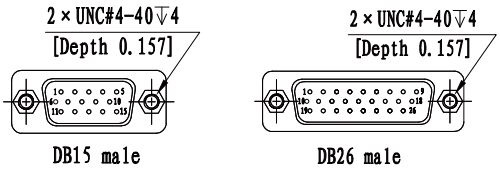
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15/26Pin Male

Weight: 260g



◆ Truth Table

⋆ For Latching mode, there is no indication function, and the control interface is DB15 Male.

Latching Non TTL						
Actuator Terminals D-SUB 15/26Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	V(RESET)		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-
16	VDC		-	-	-	-
17~26	N/A					
Note: The switch should be powered on pin7 before RESET!						

Latching TTL						
Actuator Terminals D-SUB 15/26Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	TTL(RESET)		-	-	-	-
8	VDC		-	-	-	-
9	GND		-	-	-	-
10	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
11	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
12	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
13	Ind.4		-	-	RF 4-0	RF 4-0
14	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
15	Ind.6		-	RF 6-0	-	RF 6-0
16	Ind.com		-	-	-	-
17~26	N/A					
Note: The switch should be powered on pin7 before RESET!						

Normally open Non TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Normally open TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		S								
Standard Series	3:SP3T 4:SP4T 5:SP5T 6:SP6T	SMA	N:Normally open L:Latching	06:DC~6GHz 08:DC~8GHz 12:DC~12.4GHz 18:DC~18GHz	05:5V 12:12V 24:24V 28:28V	W:Non Terminated T:Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S:Normal B:Backplane	2:D-Sub 15 Male (3 rows) 5:D-Sub 26 Male (3 rows)

★ EXP：E3SN0605W00S2：Standard Series、SP3T、SMA、Normally open、DC~6GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

SP3T-6T 26.5GHz
Terminated
Normally open/Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.5	50	1.5	50
18-26.5	0.6	50	1.6	15

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	200	180
	Latching	320	200	180
	Latching(RESET)	1920	1200	1080

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

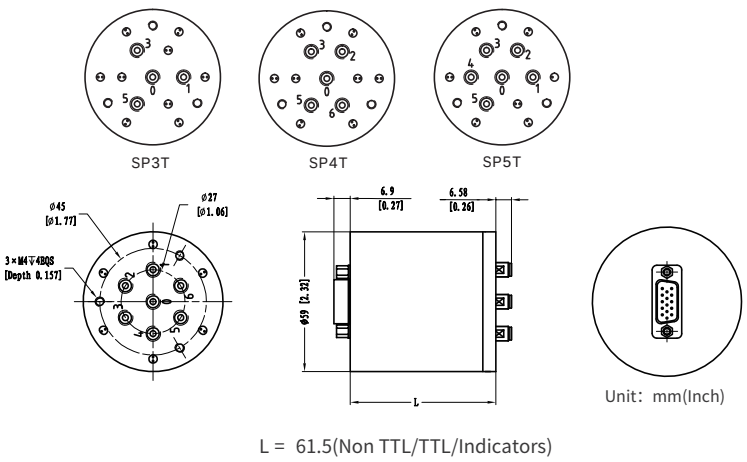
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

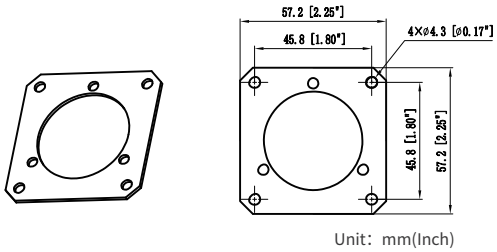
- DC to 26.5GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

◆ Outline Drawing



L = 61.5(Non TTL/TTL/Indicators)

◆ Backplane



◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

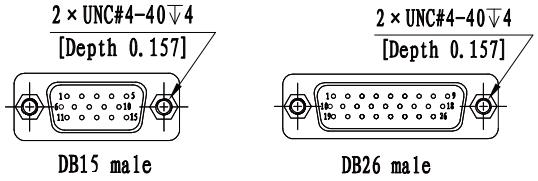
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15/26Pin Male

Weight: 260g



◆ Truth Table

* For Latching mode, there is no indication function, and the control interface is DB15 Male.

Latching Non TTL						
Actuator Terminals D-SUB 15/26Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	V(RESET)		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-
16	VDC		-	-	-	-
17~26	N/A					
Note: The switch should be powered on pin7 before RESET!						

Latching TTL						
Actuator Terminals D-SUB 15/26Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	TTL(RESET)		-	-	-	-
8	VDC		-	-	-	-
9	GND		-	-	-	-
10	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
11	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
12	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
13	Ind.4		-	-	RF 4-0	RF 4-0
14	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
15	Ind.6		-	RF 6-0	-	RF 6-0
16	Ind.com		-	-	-	-
17~26	N/A					
Note: The switch should be powered on pin7 before RESET!						

Normally open Non TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Normally open TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		S		26						
Standard Series	3:SP3T 4:SP4T 5:SP5T 6:SP6T	SMA	N:Normally open L:Latching	DC~26.5GHz	05:5V 12:12V 24:24V 28:28V	W:Non Terminated T:Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S:Normal B:Backplane	2:D-Sub 15 Male (3 rows) 5:D-Sub 26 Male (3 rows)

★ EXP：E3SN2605W00S2：Standard Series、SP3T、SMA、Normally open、DC~26.5GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

SP3T-6T 40GHz
Terminated
Normally open/Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	70	1.4	30
12-18	0.5	60	1.5	25
18-26.5	0.7	55	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5

◆ Product Functions

- DC to 40GHz
- Low loss, Low VSWR, High Isolation
- 2.92 Connector
- Selectable TTL driver control

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	200	180
	Latching	320	200	180
	Latching(RESET)	1920	1200	1080

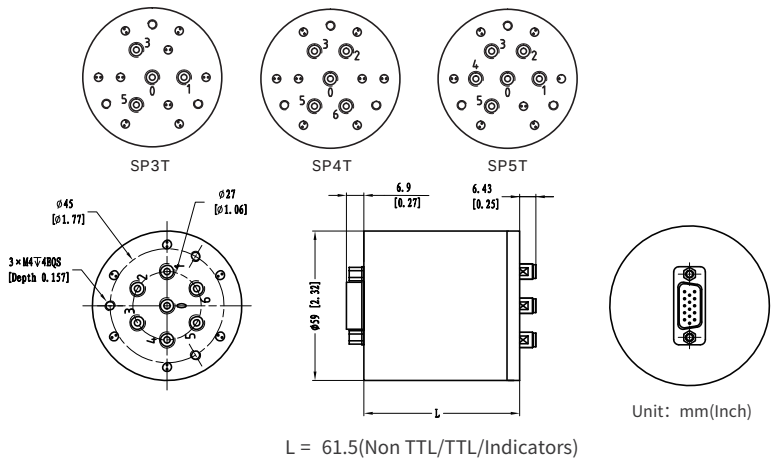
* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

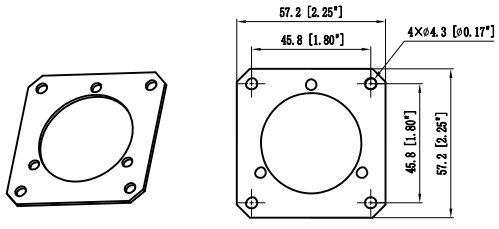
◆ Outline Drawing



Unit: mm(Inch)

L = 61.5(Non TTL/TTL/Indicators)

◆ Backplane



Unit: mm(Inch)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 2.92 Female

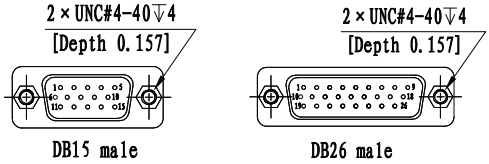
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15/26Pin Male

Weight: 260g



◆ Truth Table

* For Latching mode, there is no indication function, and the control interface is DB15 Male.

Latching Non TTL						
Actuator Terminals D-SUB 15/26Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	V (RESET)		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-
16	VDC		-	-	-	-
17~26	N/A					
Note: The switch should be powered on pin7 before RESET!						

Latching TTL						
Actuator Terminals D-SUB 15/26Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	TTL (RESET)		-	-	-	-
8	VDC		-	-	-	-
9	GND		-	-	-	-
10	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
11	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
12	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
13	Ind.4		-	-	RF 4-0	RF 4-0
14	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
15	Ind.6		-	RF 6-0	-	RF 6-0
16	Ind.com		-	-	-	-
17~26	N/A					
Note: The switch should be powered on pin7 before RESET!						

Normally open Non TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Normally open TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		K		40						
Standard Series	3:SP3T 4:SP4T 5:SP5T 6:SP6T	2.92mm	N:Normally open L:Latching	DC~40GHz	05:5V 12:12V 24:24V 28:28V	W:Non Terminated T:Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S:Normal B:Backplane	2:D-Sub 15 Male (3 rows) 5:D-Sub 26 Male (3 rows)

★ EXP：E3KN4005W00S2：Standard Series、SP3T、2.92mm、Normally open、DC~40GHz、5V、Non Terminated 、Negative common、Standard D-Sub 15 Male.

SP3T-6T 43.5GHz
Terminated
Normally open/Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	70	1.4	30
12-18	0.5	60	1.5	25
18-26.5	0.7	55	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5
40-43.5	1.0	50	2.0	4

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	200	180
	Latching	320	200	180
	Latching(RESET)	1920	1200	1080

⋆ It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

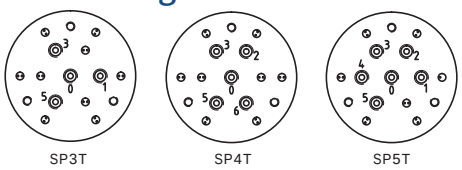
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

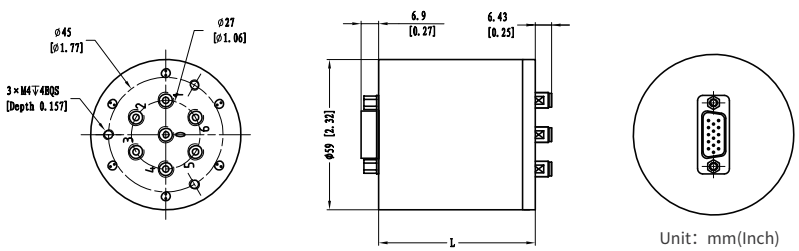
⋆ Connect VDC &GND before the function operates

◆ Product Functions

- DC to 43.5GHz
- Low loss, Low VSWR, High Isolation
- 2.92 Connector
- Selectable TTL driver control

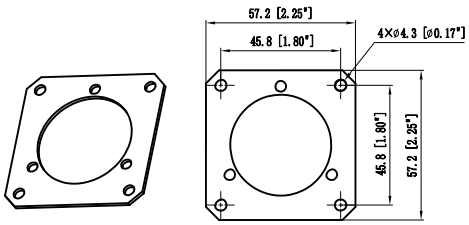
◆ Outline Drawing





L = 61.5(Non TTL/TTL/Indicators)

◆ Backplane



◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 2.92 Female

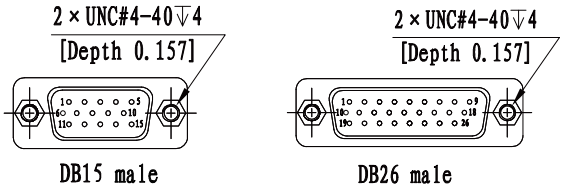
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15/26Pin Male

Weight: 260g



◆ Truth Table

* For Latching mode, there is no indication function, and the control interface is DB15 Male.

Latching Non TTL						
Actuator Terminals D-SUB 15/26Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	V(RESET)		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-
16	VDC		-	-	-	-
17~26	N/A					
Note: The switch should be powered on pin7 before RESET!						

Latching TTL						
Actuator Terminals D-SUB 15/26Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	TTL (RESET)		-	-	-	-
8	VDC		-	-	-	-
9	GND		-	-	-	-
10	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
11	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
12	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
13	Ind.4		-	-	RF 4-0	RF 4-0
14	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
15	Ind.6		-	RF 6-0	-	RF 6-0
16	Ind.com		-	-	-	-
17~26	N/A					
Note: The switch should be powered on pin7 before RESET!						

Normally open Non TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Normally open TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		K		43						
Standard Series	3:SP3T 4:SP4T 5:SP5T 6:SP6T	2.92mm	N:Normally open L:Latching	DC~43.5GHz	05:5V 12:12V 24:24V 28:28V	W:Non Terminated T:Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S:Normal B:Backplane	2:D-Sub 15 Male (3 rows) 5:D-Sub 26 Male (3 rows)

★ EXP：E3KN4305W00S2：Standard Series、SP3T、2.92mm、Normally open、DC~43.5GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

SP3T-6T 50GHz
Terminated
Normally open/Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	70	1.4	30
12-18	0.5	60	1.5	25
18-26.5	0.7	55	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5
40-43	1.0	50	2.0	4
43-50	1.1	50	2.1	3

◆ Product Functions

- DC to 50GHz
- Low loss, Low VSWR, High Isolation
- 1.85 Connector
- Selectable TTL driver control

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	200	180
	Latching	320	200	180
	Latching(RESET)	1920	1200	1080

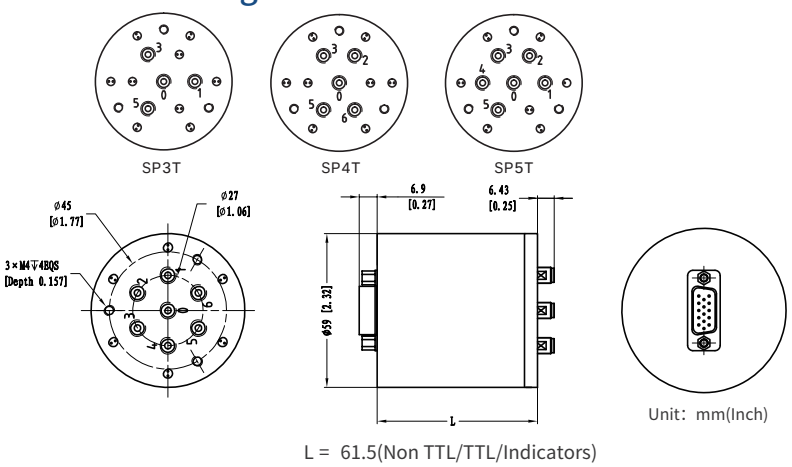
* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

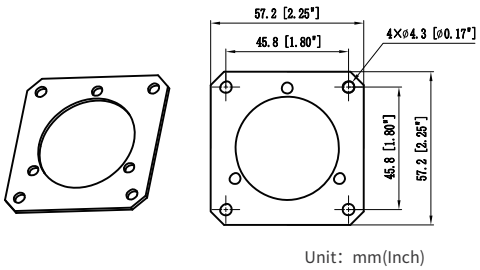
* Connect VDC &GND before the function operates

◆ Outline Drawing



L = 61.5(Non TTL/TTL/Indicators)

◆ Backplane



◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 1.85 Female

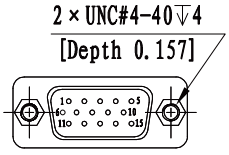
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

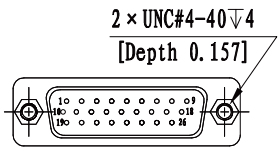
Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15/26Pin Male

Weight: 260g



DB15 male



DB26 male

◆ Truth Table

* For Latching mode, there is no indication function, and the control interface is DB15 Male.

Latching Non TTL						
Actuator Terminals D-SUB 15/26Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	V (RESET)		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-
16	VDC		-	-	-	-
17~26	N/A					
Note: The switch should be powered on pin7 before RESET!						

Latching TTL						
Actuator Terminals D-SUB 15/26Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	TTL (RESET)		-	-	-	-
8	VDC		-	-	-	-
9	GND		-	-	-	-
10	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
11	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
12	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
13	Ind.4		-	-	RF 4-0	RF 4-0
14	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
15	Ind.6		-	RF 6-0	-	RF 6-0
16	Ind.com		-	-	-	-
17~26	N/A					
Note: The switch should be powered on pin7 before RESET!						

Normally open Non TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Normally open TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		5		50						
Standard Series	3:SP3T 4:SP4T 5:SP5T 6:SP6T	1.85mm	N:Normally open L:Latching	DC~50GHz	05:5V 12:12V 24:24V 28:28V	W:Non Terminated T:Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S:Normal B:Backplane	2:D-Sub 15 Male (3 rows) 5:D-Sub 26 Male (3 rows)

★ EXP：E35N5005W00S2：Standard Series、SP3T、1.85mm、Normally open、DC~50GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

SP3T-6T 53GHz
Terminated
Normally open/Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	70	1.4	30
12-18	0.5	60	1.5	25
18-26.5	0.7	55	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5
40-43	1.0	50	2.0	4
43-50	1.1	50	2.1	3
50-53	1.2	50	2.2	2

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	200	180
	Latching	320	200	180
	Latching(RESET)	320	200	180

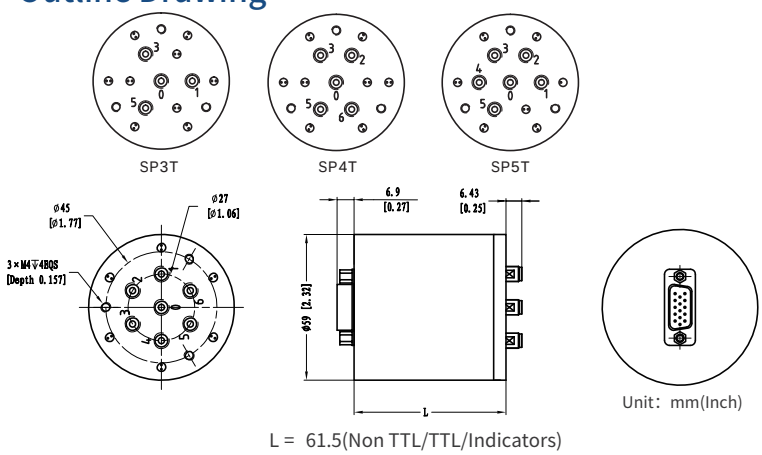
* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Outline Drawing

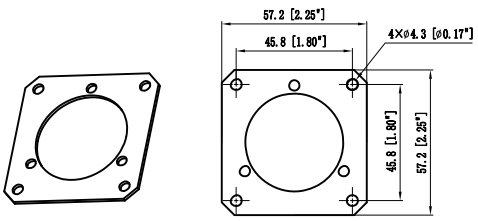


L = 61.5(Non TTL/TTL/Indicators)

◆ Product Functions

- DC to 53GHz
- Low loss, Low VSWR, High Isolation
- 1.85 Connector
- Selectable TTL driver control

◆ Backplane



◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 1.85 Female

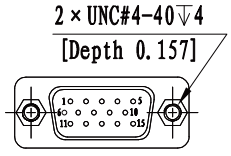
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

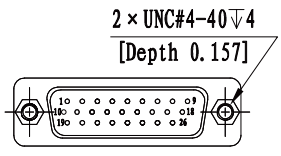
Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15/26Pin Male

Weight: 260g



DB15 male



DB26 male

◆ Truth Table

⋆ For Latching mode, there is no indication function, and the control interface is DB15 Male.

Latching Non TTL						
Actuator Terminals D-SUB 15/26Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	V (RESET)		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-
16	VDC		-	-	-	-
17~25	N/A					
Note: The switch should be powered on pin7 before RESET!						

Latching TTL						
Actuator Terminals D-SUB 15/26Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	TTL (RESET)		-	-	-	-
8	VDC		-	-	-	-
9	GND		-	-	-	-
10	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
11	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
12	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
13	Ind.4		-	-	RF 4-0	RF 4-0
14	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
15	Ind.6		-	RF 6-0	-	RF 6-0
16	Ind.com		-	-	-	-
17~25	N/A					
Note: The switch should be powered on pin7 before RESET!						

Normally open Non TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Normally open TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		5		53						
Standard Series	3:SP3T 4:SP4T 5:SP5T 6:SP6T	1.85mm	N:Normally open L:Latching	DC~53GHz	05:5V 12:12V 24:24V 28:28V	W:Non Terminated T:Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S:Normal B:Backplane	2:D-Sub 15 Male (3 rows) 5:D-Sub 26 Male (3 rows)

★ EXP：E35N5305W00S2：Standard Series、SP3T、1.85mm、Normally open、DC~53GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

SP7T-8T 18GHz
Terminated
Normally open/Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.5	50	1.5	50

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	200	180
	Latching	320	200	180
	Latching(RESET)	2560	1600	1440

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

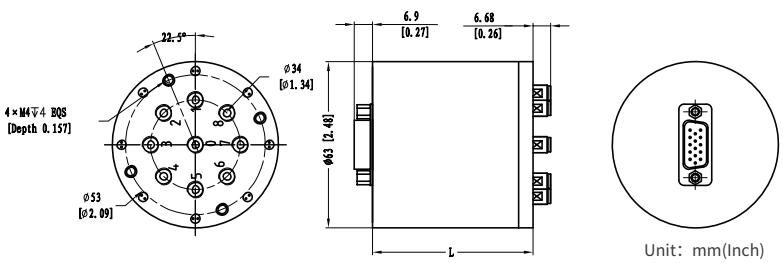
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

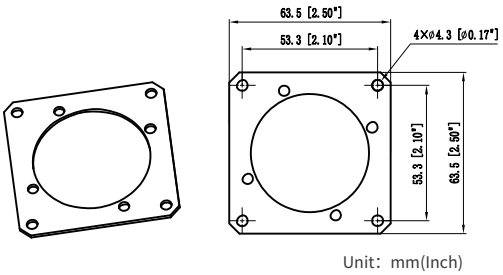
- DC to 18GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

◆ Outline Drawing



L = 61.5(Non TTL/TTL/Indicators)

◆ Backplane



◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

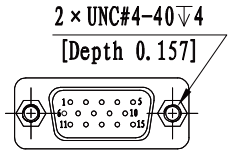
Impedance: 50Ω

Actuator Terminals: D-SUB 15/26Pin Male

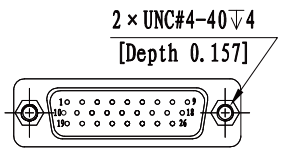
Weight: 320G

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS



DB15 male



DB26 male

◆ Truth Table

* No indication function, control interface DB15 Male.

Normally open Non TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	V1		RF 1-0	RF 1-0
2	V2		RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0
4	V4		RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0
6	V6		RF 6-0	RF 6-0
7	V7		RF 7-0	RF 7-0
8	V8		-	RF 8-0
9	GND		-	-
10	Ind.1	Indicators	RF 1-0	RF 1-0
11	Ind.2		RF 2-0	RF 2-0
12	Ind.3		RF 3-0	RF 3-0
13	Ind.4		RF 4-0	RF 4-0
14	Ind.5		RF 5-0	RF 5-0
15	Ind.6		RF 6-0	RF 6-0
16	Ind.7		RF 7-0	RF 7-0
17	Ind.8		-	RF 8-0
18	Ind.com		-	-
19	VDC		-	-
20~26	N/A		-	-

Normally open TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	TTL		RF 1-0	RF 1-0
2	TTL		RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0
4	TTL		RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0
6	TTL		RF 6-0	RF 6-0
7	TTL		RF 7-0	RF 7-0
8	TTL		-	RF 8-0
9	VDC		-	-
10	GND		-	-
11	Ind.1	Indicators	RF 1-0	RF 1-0
12	Ind.2		RF 2-0	RF 2-0
13	Ind.3		RF 3-0	RF 3-0
14	Ind.4		RF 4-0	RF 4-0
15	Ind.5		RF 5-0	RF 5-0
16	Ind.6		RF 6-0	RF 6-0
17	Ind.7		RF 7-0	RF 7-0
18	Ind.8		-	RF 8-0
19	Ind.com		-	-
20~26	N/A		-	-

Latching Non TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	V1		RF 1-0	RF 1-0
2	V2		RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0
4	V4		RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0
6	V6		RF 6-0	RF 6-0
7	V7		RF 7-0	RF 7-0
8	V8		-	RF 8-0
9	V(RESET)		-	-
10	GND		-	-
11	Ind.1	Indicators	RF 1-0	RF 1-0
12	Ind.2		RF 2-0	RF 2-0
13	Ind.3		RF 3-0	RF 3-0
14	Ind.4		RF 4-0	RF 4-0
15	Ind.5		RF 5-0	RF 5-0
16	Ind.6		RF 6-0	RF 6-0
17	Ind.7		RF 7-0	RF 7-0
18	Ind.8		-	RF 8-0
19	Ind.com		-	-
20	VDC		-	-
21~26	N/A		-	-
Note: The switch should be powered on pin9 before RESET!				

Latching TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	TTL		RF 1-0	RF 1-0
2	TTL		RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0
4	TTL		RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0
6	TTL		RF 6-0	RF 6-0
7	TTL		RF 7-0	RF 7-0
8	TTL		-	RF 8-0
9	TTL (RESET)		-	-
10	VDC		-	-
11	GND		-	-
12	Ind.1	Indicators	RF 1-0	RF 1-0
13	Ind.2		RF 2-0	RF 2-0
14	Ind.3		RF 3-0	RF 3-0
15	Ind.4		RF 4-0	RF 4-0
16	Ind.5		RF 5-0	RF 5-0
17	Ind.6		RF 6-0	RF 6-0
18	Ind.7		RF 7-0	RF 7-0
19	Ind.8		-	RF 8-0
20	Ind.com		-	-
21~26	N/A		-	-
Note: The switch should be powered on pin9 before RESET!				

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		S								
Standard Series	7:SP7T 8:SP8T	SMA	N:Normally open L:Latching	06:DC~6GHz 08:DC~8GHz 12:DC~12.4GHz 18:DC~18GHz	05:5V 12:12V 24:24V 28:28V	W:Non Terminated T:Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Ground Plane And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S:Normal B:Backplane	2:D-Sub 15 Male (3 rows) 5:D-Sub 26 Male (3 rows)

★ EXP：E7SN0605W00S2：Standard Series、SP7T、SMA、Normally open、DC~6GHz、5V、Non Terminated 、Ground Plane、Standard 、Normal、D-Sub 15 Male.

SP7T-8T 26.5GHz
Terminated
Normally open/Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.5	50	1.5	50
18-26.5	0.6	50	1.6	15

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	200	180
	Latching	320	200	180
	Latching(RESET)	2560	1600	1440

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

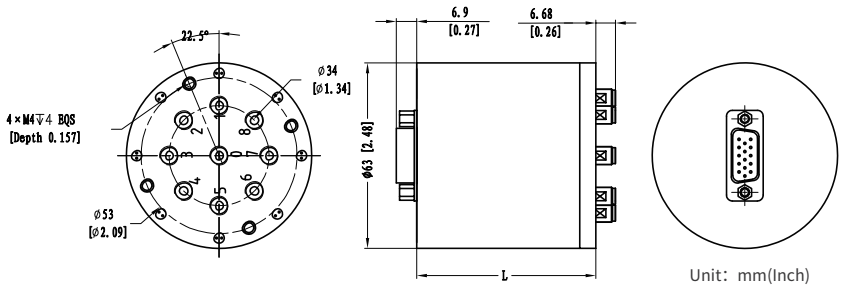
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

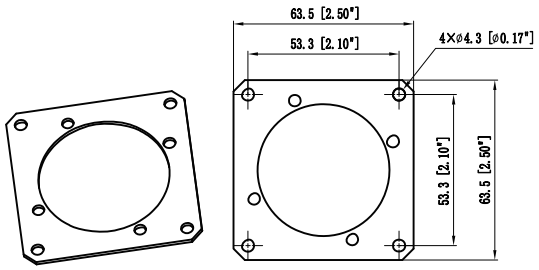
- DC to 26.5GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

◆ Outline Drawing



Unit: mm(Inch)

◆ Backplane



Unit: mm(Inch)

L = 61.5(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

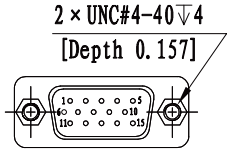
Impedance: 50Ω

Actuator Terminals: D-SUB 15/26Pin Male

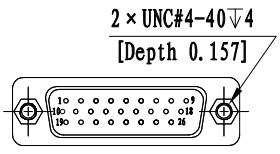
Weight: 320G

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS



DB15 male



DB26 male

◆ Truth Table

* No indication function, control interface DB15 Male.

Normally open Non TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	V1		RF 1-0	RF 1-0
2	V2		RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0
4	V4		RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0
6	V6		RF 6-0	RF 6-0
7	V7		RF 7-0	RF 7-0
8	V8		-	RF 8-0
9	GND		-	-
10	Ind.1	Indicators	RF 1-0	RF 1-0
11	Ind.2		RF 2-0	RF 2-0
12	Ind.3		RF 3-0	RF 3-0
13	Ind.4		RF 4-0	RF 4-0
14	Ind.5		RF 5-0	RF 5-0
15	Ind.6		RF 6-0	RF 6-0
16	Ind.7		RF 7-0	RF 7-0
17	Ind.8		-	RF 8-0
18	Ind.com		-	-
19	VDC		-	-
20~26	N/A		-	-

Normally open TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	TTL		RF 1-0	RF 1-0
2	TTL		RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0
4	TTL		RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0
6	TTL		RF 6-0	RF 6-0
7	TTL		RF 7-0	RF 7-0
8	TTL		-	RF 8-0
9	VDC		-	-
10	GND		-	-
11	Ind.1	Indicators	RF 1-0	RF 1-0
12	Ind.2		RF 2-0	RF 2-0
13	Ind.3		RF 3-0	RF 3-0
14	Ind.4		RF 4-0	RF 4-0
15	Ind.5		RF 5-0	RF 5-0
16	Ind.6		RF 6-0	RF 6-0
17	Ind.7		RF 7-0	RF 7-0
18	Ind.8		-	RF 8-0
19	Ind.com		-	-
20~26	N/A		-	-

Latching Non TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	V1		RF 1-0	RF 1-0
2	V2		RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0
4	V4		RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0
6	V6		RF 6-0	RF 6-0
7	V7		RF 7-0	RF 7-0
8	V8		-	RF 8-0
9	V(RESET)		-	-
10	GND		-	-
11	Ind.1	Indicators	RF 1-0	RF 1-0
12	Ind.2		RF 2-0	RF 2-0
13	Ind.3		RF 3-0	RF 3-0
14	Ind.4		RF 4-0	RF 4-0
15	Ind.5		RF 5-0	RF 5-0
16	Ind.6		RF 6-0	RF 6-0
17	Ind.7		RF 7-0	RF 7-0
18	Ind.8		-	RF 8-0
19	Ind.com		-	-
20	VDC		-	-
21~26	N/A		-	-
Note: The switch should be powered on pin9 before RESET!				

Latching TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	TTL		RF 1-0	RF 1-0
2	TTL		RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0
4	TTL		RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0
6	TTL		RF 6-0	RF 6-0
7	TTL		RF 7-0	RF 7-0
8	TTL		-	RF 8-0
9	TTL(RESET)		-	-
10	VDC		-	-
11	GND		-	-
12	Ind.1	Indicators	RF 1-0	RF 1-0
13	Ind.2		RF 2-0	RF 2-0
14	Ind.3		RF 3-0	RF 3-0
15	Ind.4		RF 4-0	RF 4-0
16	Ind.5		RF 5-0	RF 5-0
17	Ind.6		RF 6-0	RF 6-0
18	Ind.7		RF 7-0	RF 7-0
19	Ind.8		-	RF 8-0
20	Ind.com		-	-
21~26	N/A		-	-
Note: The switch should be powered on pin9 before RESET!				

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		S		26						

- Series: E — Standard Series
- Number Of Positions: 7:SP7T; 8:SP8T
- Rf Connectors: S — SMA
- Type: N:Normally open; L:Latching
- Frequency: 26 — DC~26.5GHz
- Actuator Voltage: 05:5V; 12:12V; 24:24V; 28:28V
- Terminated: W:Non Terminated; T:Terminated
- Driver: 0:Negative common; 1:TTL Driver; 2:Positive Common; 3:Self Cutoff; 4:Negative common And Indicators; 5:TTL driver And Indicators; 6:Positive Common And Indicators
- Operating Temperature: 0:Standard (-25°C~65°C); 1:Extended1 (-45°C~85°C); 2:Extended2 (-55°C~85°C)
- Install: S:Normal; B:Backplane
- Control connector: 2:D-Sub 15 Male (3 rows); 5:D-Sub 26 Male (3 rows)

★ EXP：E7SN2605W00S2：Standard Series、SP7T、SMA、Normally open、DC~26.5GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

SP7T-8T 40GHz
Terminated
Normally open/Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	70	1.4	30
12-18	0.5	60	1.5	25
18-26.5	0.7	55	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	200	180
	Latching	320	200	180
	Latching(RESET)	2560	1600	1440

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

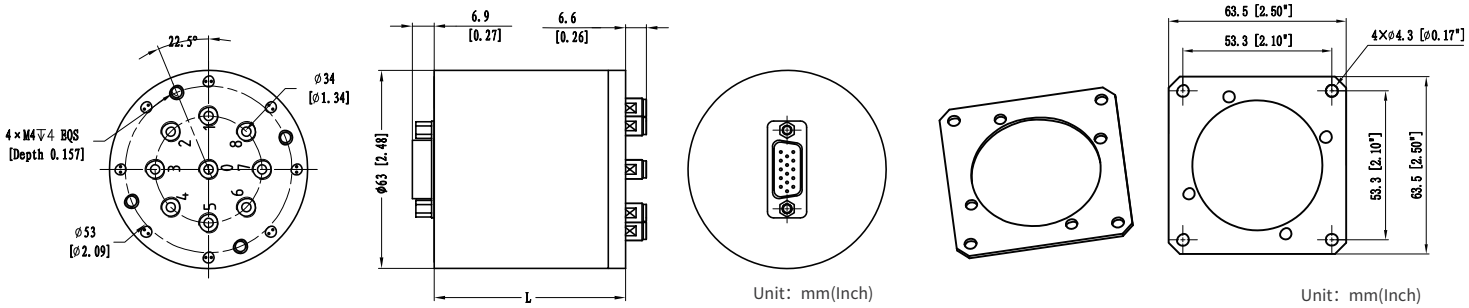
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 40GHz
- Low loss, Low VSWR, High Isolation
- 2.92 Connector
- Selectable TTL driver control

◆ Outline Drawing



L = 61.5(Non TTL/TTL/Indicators)

◆ Backplane

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: 2.92 Female

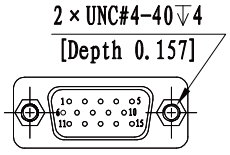
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

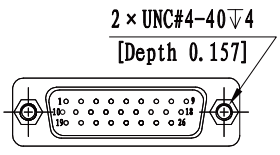
Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15Pin Male

Weight: 320G



DB15 male



DB26 male

◆ Truth Table

* No indication function, control interface DB15 Male.

Normally open Non TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	V1		RF 1-0	RF 1-0
2	V2		RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0
4	V4		RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0
6	V6		RF 6-0	RF 6-0
7	V7		RF 7-0	RF 7-0
8	V8		-	RF 8-0
9	GND		-	-
10	Ind.1	Indicators	RF 1-0	RF 1-0
11	Ind.2		RF 2-0	RF 2-0
12	Ind.3		RF 3-0	RF 3-0
13	Ind.4		RF 4-0	RF 4-0
14	Ind.5		RF 5-0	RF 5-0
15	Ind.6		RF 6-0	RF 6-0
16	Ind.7		RF 7-0	RF 7-0
17	Ind.8		-	RF 8-0
18	Ind.com		-	-
19	VDC		-	-
20~26	N/A		-	-

Normally open TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	TTL		RF 1-0	RF 1-0
2	TTL		RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0
4	TTL		RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0
6	TTL		RF 6-0	RF 6-0
7	TTL		RF 7-0	RF 7-0
8	TTL		-	RF 8-0
9	VDC		-	-
10	GND		-	-
11	Ind.1	Indicators	RF 1-0	RF 1-0
12	Ind.2		RF 2-0	RF 2-0
13	Ind.3		RF 3-0	RF 3-0
14	Ind.4		RF 4-0	RF 4-0
15	Ind.5		RF 5-0	RF 5-0
16	Ind.6		RF 6-0	RF 6-0
17	Ind.7		RF 7-0	RF 7-0
18	Ind.8		-	RF 8-0
19	Ind.com		-	-
20~26	N/A		-	-

Latching Non TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	V1		RF 1-0	RF 1-0
2	V2		RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0
4	V4		RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0
6	V6		RF 6-0	RF 6-0
7	V7		RF 7-0	RF 7-0
8	V8		-	RF 8-0
9	V(RESET)		-	-
10	GND		-	-
11	Ind.1	Indicators	RF 1-0	RF 1-0
12	Ind.2		RF 2-0	RF 2-0
13	Ind.3		RF 3-0	RF 3-0
14	Ind.4		RF 4-0	RF 4-0
15	Ind.5		RF 5-0	RF 5-0
16	Ind.6		RF 6-0	RF 6-0
17	Ind.7		RF 7-0	RF 7-0
18	Ind.8		-	RF 8-0
19	Ind.com		-	-
20	VDC		-	-
21~26	N/A		-	-
Note: The switch should be powered on pin9 before RESET!				

Latching TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	TTL		RF 1-0	RF 1-0
2	TTL		RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0
4	TTL		RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0
6	TTL		RF 6-0	RF 6-0
7	TTL		RF 7-0	RF 7-0
8	TTL		-	RF 8-0
9	TTL (RESET)		-	-
10	VDC		-	-
11	GND		-	-
12	Ind.1	Indicators	RF 1-0	RF 1-0
13	Ind.2		RF 2-0	RF 2-0
14	Ind.3		RF 3-0	RF 3-0
15	Ind.4		RF 4-0	RF 4-0
16	Ind.5		RF 5-0	RF 5-0
17	Ind.6		RF 6-0	RF 6-0
18	Ind.7		RF 7-0	RF 7-0
19	Ind.8		-	RF 8-0
20	Ind.com		-	-
21~26	N/A		-	-
Note: The switch should be powered on pin9 before RESET!				

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		K		40						
Standard Series	7:SP7T 8:SP8T	2.92mm	N:Normally open L:Latching	DC~40GHz	05:5V 12:12V 24:24V 28:28V	W:Non Terminated T:Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S:Normal B:Backplane	2:D-Sub 15 Male (3 rows) 5:D-Sub 26 Male (3 rows)

★ EXP：E7KN4005W00S2：Standard Series、SP7T、2.92mm、Normally open、DC~40GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

SP9T-10T 18GHz
Terminated
Normally open/Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.5	50	1.5	50

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	200	180
	Latching	320	200	180
	Latching(RESET)	3200	2000	1800

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

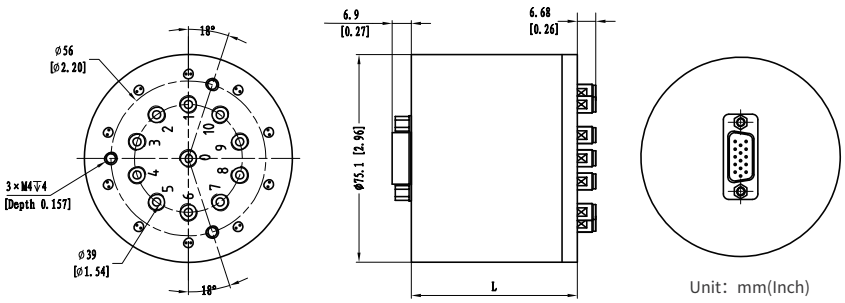
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

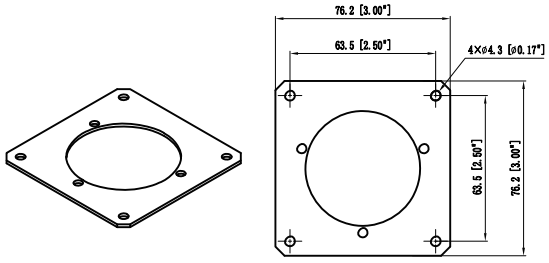
- DC to 18GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

◆ Outline Drawing



L = 61.5(Non TTL/TTL/Indicators)

◆ Backplane



◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

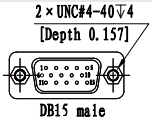
Impedance: 50Ω

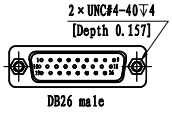
Actuator Terminals: D-SUB 15/26Pin Male

Weight: 405g

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS





◆ Truth Table

⋆ No indication function, control interface DB15 Male.

Normally open Non TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP9T	SP10T
1	V1		RF 1-0	RF 1-0
2	V2		RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0
4	V4		RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0
6	V6		RF 6-0	RF 6-0
7	V7		RF 7-0	RF 7-0
8	V8		RF 8-0	RF 8-0
9	V9		RF 9-0	RF 9-0
10	V10		-	RF 10-0
11	GND		-	-
12	Ind.1	Indicators	RF 1-0	RF 1-0
13	Ind.2		RF 2-0	RF 2-0
14	Ind.3		RF 3-0	RF 3-0
15	Ind.4		RF 4-0	RF 4-0
16	Ind.5		RF 5-0	RF 5-0
17	Ind.6		RF 6-0	RF 6-0
18	Ind.7		RF 7-0	RF 7-0
19	Ind.8		RF 8-0	RF 8-0
20	Ind.9		RF 9-0	RF 9-0
21	Ind.10		-	RF 10-0
22	Ind.com		-	-
23	VDC		-	-
24~26	N/A		-	-

Normally open TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP9T	SP10T
1	TTL		RF 1-0	RF 1-0
2	TTL		RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0
4	TTL		RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0
6	TTL		RF 6-0	RF 6-0
7	TTL		RF 7-0	RF 7-0
8	TTL		RF 8-0	RF 8-0
9	TTL		RF 9-0	RF 9-0
10	TTL		-	RF 10-0
11	VDC		-	-
12	GND		-	-
13	Ind.1	Indicators	RF 1-0	RF 1-0
14	Ind.2		RF 2-0	RF 2-0
15	Ind.3		RF 3-0	RF 3-0
16	Ind.4		RF 4-0	RF 4-0
17	Ind.5		RF 5-0	RF 5-0
18	Ind.6		RF 6-0	RF 6-0
19	Ind.7		RF 7-0	RF 7-0
20	Ind.8		RF 8-0	RF 8-0
21	Ind.9		RF 9-0	RF 9-0
22	Ind.10		-	RF 10-0
23	Ind.com		-	-
24~26	N/A		-	-

Latching Non TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP9T	SP10T
1	V1		RF 1-0	RF 1-0
2	V2		RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0
4	V4		RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0
6	V6		RF 6-0	RF 6-0
7	V7		RF 7-0	RF 7-0
8	V8		RF 8-0	RF 8-0
9	V9		RF 9-0	RF 9-0
10	V10		-	RF 10-0
11	V (RESET)		-	-
12	GND		-	-
13	Ind.1	Indicators	RF 1-0	RF 1-0
14	Ind.2		RF 2-0	RF 2-0
15	Ind.3		RF 3-0	RF 3-0
16	Ind.4		RF 4-0	RF 4-0
17	Ind.5		RF 5-0	RF 5-0
18	Ind.6		RF 6-0	RF 6-0
19	Ind.7		RF 7-0	RF 7-0
20	Ind.8		RF 8-0	RF 8-0
21	Ind.9		RF 9-0	RF 9-0
22	Ind.10		-	RF 10-0
23	Ind.com		-	-
24	VDC		-	-
25~26	N/A		-	-
Note: The switch should be powered on pin11 before RESET!				

Latching TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP9T	SP10T
1	TTL		RF 1-0	RF 1-0
2	TTL		RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0
4	TTL		RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0
6	TTL		RF 6-0	RF 6-0
7	TTL		RF 7-0	RF 7-0
8	TTL		RF 8-0	RF 8-0
9	TTL		RF 9-0	RF 9-0
10	TTL		-	RF 10-0
11	TTL (RESET)		-	-
12	VDC		-	-
13	GND		-	-
14	Ind.1	Indicators	RF 1-0	RF 1-0
15	Ind.2		RF 2-0	RF 2-0
16	Ind.3		RF 3-0	RF 3-0
17	Ind.4		RF 4-0	RF 4-0
18	Ind.5		RF 5-0	RF 5-0
19	Ind.6		RF 6-0	RF 6-0
20	Ind.7		RF 7-0	RF 7-0
21	Ind.8		RF 8-0	RF 8-0
22	Ind.9		RF 9-0	RF 9-0
23	Ind.10		-	RF 10-0
24	Ind.com		-	-
25~26	N/A		-	-
Note: The switch should be powered on pin11 before RESET!				

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		S								
Standard Series	9:SP9T K:SP10T	SMA	N:Normally Open L:Latching	06:DC~6GHz 08:DC~8GHz 12:DC~12.4GHz 18:DC~18GHz	05:5V 12:12V 24:24V 28:28V	W:Non Terminated T:Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S:Normal B:Backplane	2:D-Sub 15 Male (3 rows) 5:D-Sub 26 Male (3 rows)

★ EXP：E9SN0605W00S2：Standard Series、SP9T、SMA、Normally Open、DC~6GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

SP9T-10T 26.5GHz
Terminated
Normally open/Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.4	60
12-18	0.5	50	1.5	50
18-26.5	0.7	50	1.7	15

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	200	180
	Latching	320	200	180
	Latching(RESET)	3200	2000	1800

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

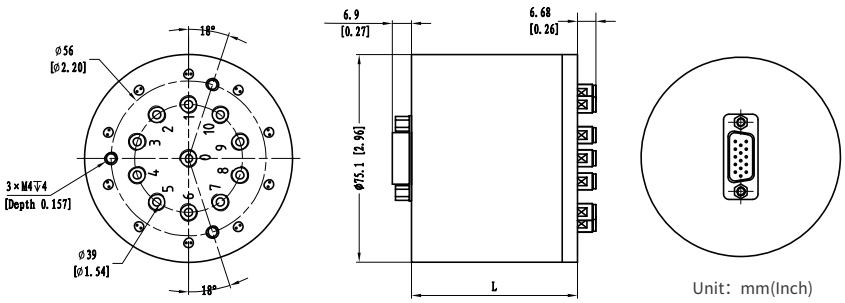
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

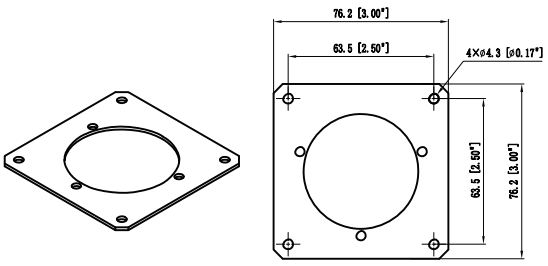
- DC to 26.5GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

◆ Outline Drawing



L = 61.5(Non TTL/TTL/Indicators)

◆ Backplane



◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature:-25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

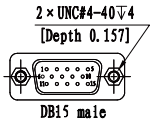
Impedance: 50Ω

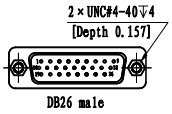
Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15/26Pin Male

Weight: 405g





◆ Truth Table

⋆ No indication function, control interface DB15 Male.

Normally open Non TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP9T	SP10T
1	V1		RF 1-0	RF 1-0
2	V2		RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0
4	V4		RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0
6	V6		RF 6-0	RF 6-0
7	V7		RF 7-0	RF 7-0
8	V8		RF 8-0	RF 8-0
9	V9		RF 9-0	RF 9-0
10	V10		-	RF 10-0
11	GND		-	-
12	Ind.1	Indicators	RF 1-0	RF 1-0
13	Ind.2		RF 2-0	RF 2-0
14	Ind.3		RF 3-0	RF 3-0
15	Ind.4		RF 4-0	RF 4-0
16	Ind.5		RF 5-0	RF 5-0
17	Ind.6		RF 6-0	RF 6-0
18	Ind.7		RF 7-0	RF 7-0
19	Ind.8		RF 8-0	RF 8-0
20	Ind.9		RF 9-0	RF 9-0
21	Ind.10		-	RF 10-0
22	Ind.com		-	-
23	VDC		-	-
24~26	N/A		-	-

Normally open TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP9T	SP10T
1	TTL		RF 1-0	RF 1-0
2	TTL		RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0
4	TTL		RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0
6	TTL		RF 6-0	RF 6-0
7	TTL		RF 7-0	RF 7-0
8	TTL		RF 8-0	RF 8-0
9	TTL		RF 9-0	RF 9-0
10	TTL		-	RF 10-0
11	VDC		-	-
12	GND		-	-
13	Ind.1	Indicators	RF 1-0	RF 1-0
14	Ind.2		RF 2-0	RF 2-0
15	Ind.3		RF 3-0	RF 3-0
16	Ind.4		RF 4-0	RF 4-0
17	Ind.5		RF 5-0	RF 5-0
18	Ind.6		RF 6-0	RF 6-0
19	Ind.7		RF 7-0	RF 7-0
20	Ind.8		RF 8-0	RF 8-0
21	Ind.9		RF 9-0	RF 9-0
22	Ind.10		-	RF 10-0
23	Ind.com		-	-
24~26	N/A		-	-

Latching Non TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP9T	SP10T
1	V1		RF 1-0	RF 1-0
2	V2		RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0
4	V4		RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0
6	V6		RF 6-0	RF 6-0
7	V7		RF 7-0	RF 7-0
8	V8		RF 8-0	RF 8-0
9	V9		RF 9-0	RF 9-0
10	V10		-	RF 10-0
11	V (RESET)		-	-
12	GND		-	-
13	Ind.1	Indicators	RF 1-0	RF 1-0
14	Ind.2		RF 2-0	RF 2-0
15	Ind.3		RF 3-0	RF 3-0
16	Ind.4		RF 4-0	RF 4-0
17	Ind.5		RF 5-0	RF 5-0
18	Ind.6		RF 6-0	RF 6-0
19	Ind.7		RF 7-0	RF 7-0
20	Ind.8		RF 8-0	RF 8-0
21	Ind.9		RF 9-0	RF 9-0
22	Ind.10		-	RF 10-0
23	Ind.com		-	-
24	VDC		-	-
25~26	N/A		-	-
Note: The switch should be powered on pin11 before RESET!				

Latching TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP9T	SP10T
1	TTL		RF 1-0	RF 1-0
2	TTL		RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0
4	TTL		RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0
6	TTL		RF 6-0	RF 6-0
7	TTL		RF 7-0	RF 7-0
8	TTL		RF 8-0	RF 8-0
9	TTL		RF 9-0	RF 9-0
10	TTL		-	RF 10-0
11	TTL (RESET)		-	-
12	VDC		-	-
13	GND		-	-
14	Ind.1	Indicators	RF 1-0	RF 1-0
15	Ind.2		RF 2-0	RF 2-0
16	Ind.3		RF 3-0	RF 3-0
17	Ind.4		RF 4-0	RF 4-0
18	Ind.5		RF 5-0	RF 5-0
19	Ind.6		RF 6-0	RF 6-0
20	Ind.7		RF 7-0	RF 7-0
21	Ind.8		RF 8-0	RF 8-0
22	Ind.9		RF 9-0	RF 9-0
23	Ind.10		-	RF 10-0
24	Ind.com		-	-
25~26	N/A		-	-
Note: The switch should be powered on pin11 before RESET!				

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		S		26						
Standard Series	9:SP9T K:SP10T	SMA	N:Normally Open L:Latching	DC~26.5GHz	05:5V 12:12V 24:24V 28:28V	W:Non Terminated T:Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S:Normal B:Backplane	2:D-Sub 15 Male (3 rows) 5:D-Sub 26 Male (3 rows)

★ EXP：E9SN2605W00S2：Standard Series、SP9T、SMA、Normally Open、DC~26.5GHz、5V、Non Terminated 、Negative common、Standard 、Normal、 D-Sub 15 Male.

SP11T-12T 18GHz
Terminated
Normally open/Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	80
6-12	0.4	60	1.5	60
12-18	0.6	50	1.6	50

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	200	180
	Latching	320	200	180
	Latching(RESET)	3840	2400	2160

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

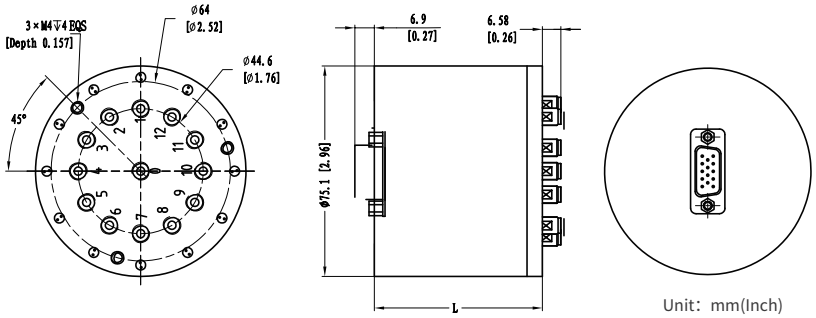
Indicators	Withstand Voltage V (max)	Current capacity mA(max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 18GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

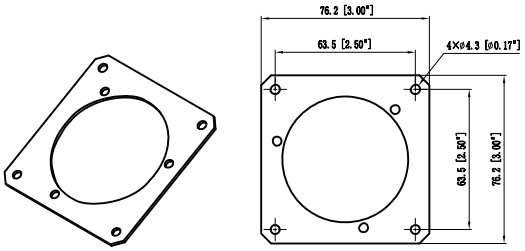
◆ Outline Drawing



Unit: mm(Inch)

L = 61.5(Non TTL/TTL/Indicators)

◆ Backplane



Unit: mm(Inch)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA Female

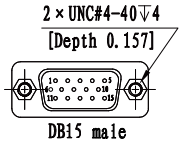
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15Pin Male

Weight: 485g



◆ Truth Table

Normally open Non TTL			
Actuator Terminals D-SUB 15Pin Male		RF Connector	
Pin No.	Define	SP11T	SP12T
1	V1	RF 1-0	RF 1-0
2	V2	RF 2-0	RF 2-0
3	V3	RF 3-0	RF 3-0
4	V4	RF 4-0	RF 4-0
5	V5	RF 5-0	RF 5-0
6	V6	RF 6-0	RF 6-0
7	V7	RF 7-0	RF 7-0
8	V8	RF 8-0	RF 8-0
9	V9	RF 9-0	RF 9-0
10	V10	RF 10-0	RF 10-0
11	V11	RF 11-0	RF 11-0
12	V12	-	RF 12-0
13	GND	-	-
14~15	N/A	-	-

Normally open TTL			
Actuator Terminals D-SUB 15Pin Male		RF Connector	
Pin No.	Define	SP11T	SP12T
1	TTL	RF 1-0	RF 1-0
2	TTL	RF 2-0	RF 2-0
3	TTL	RF 3-0	RF 3-0
4	TTL	RF 4-0	RF 4-0
5	TTL	RF 5-0	RF 5-0
6	TTL	RF 6-0	RF 6-0
7	TTL	RF 7-0	RF 7-0
8	TTL	RF 8-0	RF 8-0
9	TTL	RF 9-0	RF 9-0
10	TTL	RF 10-0	RF 10-0
11	TTL	RF 11-0	RF 11-0
12	TTL	-	RF 12-0
13	VDC	-	-
14	GND	-	-
15	N/A	-	-

Latching Non TTL			
Actuator Terminals D-SUB 15Pin Male		RF Connector	
Pin No.	Define	SP11T	SP12T
1	V1	RF 1-0	RF 1-0
2	V2	RF 2-0	RF 2-0
3	V3	RF 3-0	RF 3-0
4	V4	RF 4-0	RF 4-0
5	V5	RF 5-0	RF 5-0
6	V6	RF 6-0	RF 6-0
7	V7	RF 7-0	RF 7-0
8	V8	RF 8-0	RF 8-0
9	V9	RF 9-0	RF 9-0
10	V10	RF 10-0	RF 10-0
11	V11	RF 11-0	RF 11-0
12	V12	-	RF 12-0
13	V (RESET)	-	-
14	GND	-	-
15	N/A	-	-
Note: The switch should be powered on pin13 before RESET!			

Latching TTL			
Actuator Terminals D-SUB 15Pin Male		RF Connector	
Pin No.	Define	SP11T	SP12T
1	TTL	RF 1-0	RF 1-0
2	TTL	RF 2-0	RF 2-0
3	TTL	RF 3-0	RF 3-0
4	TTL	RF 4-0	RF 4-0
5	TTL	RF 5-0	RF 5-0
6	TTL	RF 6-0	RF 6-0
7	TTL	RF 7-0	RF 7-0
8	TTL	RF 8-0	RF 8-0
9	TTL	RF 9-0	RF 9-0
10	TTL	RF 10-0	RF 10-0
11	TTL	RF 11-0	RF 11-0
12	TTL	-	RF 12-0
13	TTL (RESET)	-	-
14	VDC	-	-
15	GND	-	-
Note: The switch should be powered on pin13 before RESET!			

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		S								2
Standard Series	L:SP11T M:SP12T	SMA	N:Normally Open L:Latching	06:DC~6GHz 08:DC~8GHz 12:DC~12.4GHz 18:DC~18GHz	05:5V 12:12V 24:24V 28:28V	W:Non Terminated T:Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S:Normal B:Backplane	D-Sub 15 Male (3 rows)

★ EXP：ELSN0605W00S2：Standard Series、SP11T、SMA、Normally Open、DC~6GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

SPDT N 12.4GHz
High Power
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-5	0.3	70	1.3	350
5-12.4	0.5	60	1.5	250

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	300	180	150
	Latching	320	180	150

⋆ It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	20mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

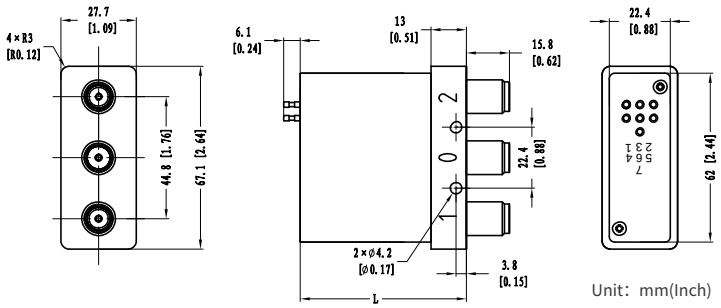
⋆ Connect VDC &GND before the function operates

◆ Product Functions

- DC to 12.4GHz
- Low loss, Low VSWR, High Isolation
- N Female Connector
- Selectable TTL driver control

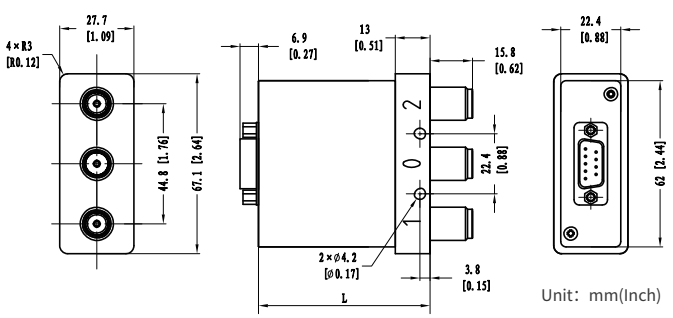
◆ Outline Drawing

Solder Pins



L = 61(Non TTL/TTL/Indicators)

D-SUB Male



L = 64(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: N Female

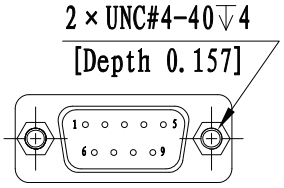
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 9Pin Male

Weight: 250g



DB9 male

◆ Truth Table

Failsafe Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	V		RF 2-0
2	N/A		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Failsafe TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	VDC		RF 2-0
2	TTL		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7~9	N/A		-

Latching Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-0
2	V2		RF 2-0
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Latching TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	VDC		
2	TTL		RF 1-0
3	GND		-
4	TTL		RF 2-0
5	Ind.1	Indicators	RF 1-0
6	Ind.2		RF 2-0
7	Ind.com		-
8~9	N/A		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltag	Terminated	Driver	Operating Temperature	Install	Control connector
	2	N				W			S	
E:Standard Series	SP2T	N	L:Latching F:Failsafe	06:DC~6GHz 08:DC~8GHz 12:DC~12.4GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 1:D-Sub 9 Male (2 rows)

★ EXP：E2NL0605W00S0：Standard Series、SP2T、N、Latching、DC~6GHz、5V、Non Terminated 、Negative common、Standard 、Normal、Solder Pins.

SPDT N 18GHz
High Power
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-5	0.3	70	1.3	350
5-12	0.5	60	1.5	250
12-18	0.7	50	1.7	180

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	300	180	150
	Latching	320	180	150

⋆ It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	20mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

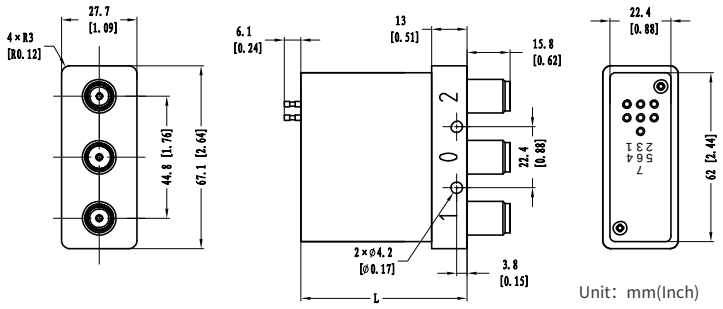
⋆ Connect VDC &GND before the function operates

◆ Product Functions

- DC to 18GHz
- Low loss, Low VSWR, High Isolation
- N Female Connector
- Selectable TTL driver control

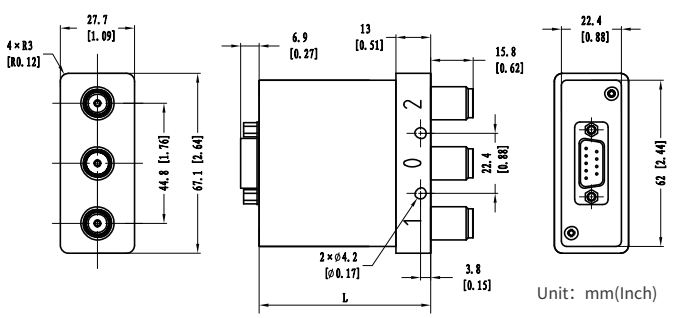
◆ Outline Drawing

Solder Pins



L = 61.5(Non TTL/TTL/Indicators)

D-SUB Male



L = 64(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: N Female

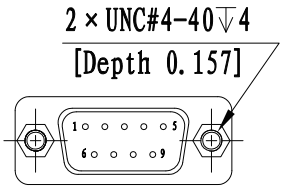
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 9Pin Male

Weight: 250g



DB9 male

◆ Truth Table

Failsafe Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	V		RF 2-0
2	N/A		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Failsafe TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	VDC		RF 2-0
2	TTL		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7~9	N/A		-

Latching Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-0
2	V2		RF 2-0
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Latching TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	VDC		
2	TTL		RF 1-0
3	GND		-
4	TTL		RF 2-0
5	Ind.1	Indicators	RF 1-0
6	Ind.2		RF 2-0
7	Ind.com		-
8~9	N/A		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
	2	N		18		W			S	
E:Standard Series	SP2T	N	L:Latching F:Failsafe	DC~18GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 1:D-Sub 9 Male (2 rows)

★ EXP：E2NL1805W00S0：Standard Series、SP2T、N、Latching、DC~18GHz、5V、Non Terminated、Negative common、Standard、Normal、Solder Pins.

SP3T-6T N 12.4GHz
High Power
Normally open/Failsafe

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-5	0.3	70	1.3	350
5-12.4	0.5	60	1.5	250

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140
	Failsafe	270	150	170

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

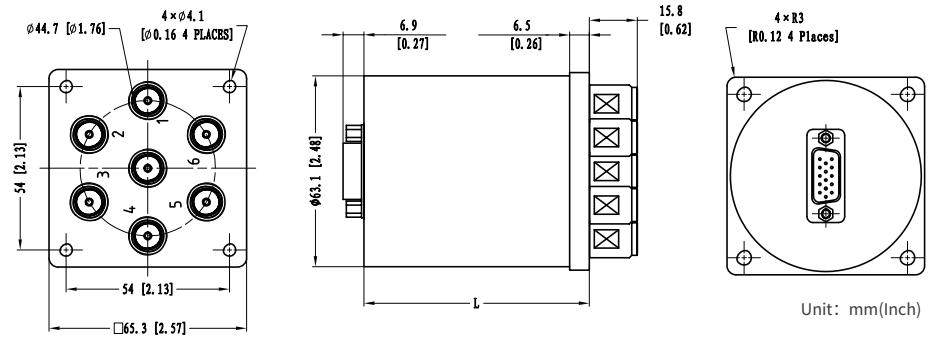
Connect VDC &GND before the function operates

*

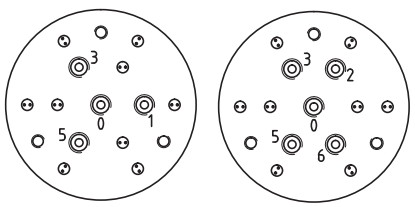
◆ Product Functions

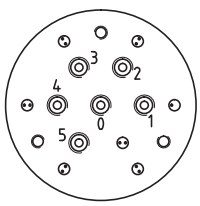
- DC to 12.4GHz
- Low loss, Low VSWR, High Isolation
- N Female Connector
- Selectable TTL control

◆ Outline Drawing



Unit: mm(Inch)





L = 74.5(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: N Female

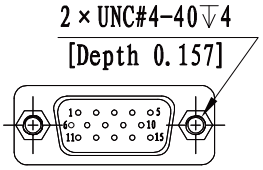
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15Pin Male

Weight: 955g



◆ Truth Table

Normally open Non TTL

Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Normally open TTL

Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

Failsafe Non TTL

Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
-	No Power		RF 1-0	RF 2-0	RF 1-0	RF 1-0
1	V1		-	-	-	-
2	V2		-	-	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

Failsafe TTL

Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
-	No Power		RF 1-0	RF 2-0	RF 1-0	RF 1-0
1	TTL		-	-	-	-
2	TTL		-	-	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E:Standard Series	3:SP3T 4:SP4T 5:SP5T 6:SP6T	N	N:Normally Open F:Failsafe	06:DC~6GHz 08:DC~8GHz 12:DC~12.4GHz	05:5V 12:12V 24:24V 28:28V	W Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S Normal	2 D-Sub 15 Male (3 rows)

★ EXP：E3NN0605W00S2：Standard Series、SP3T、N、Normally Open、DC~6GHz、5V、Non Terminated 、Negative common、Standard 、Normal、 D-Sub 15 Male.

SP7T-8T N 8GHz
High Power
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-5	0.3	70	1.3	350
5-8	0.5	60	1.5	300

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

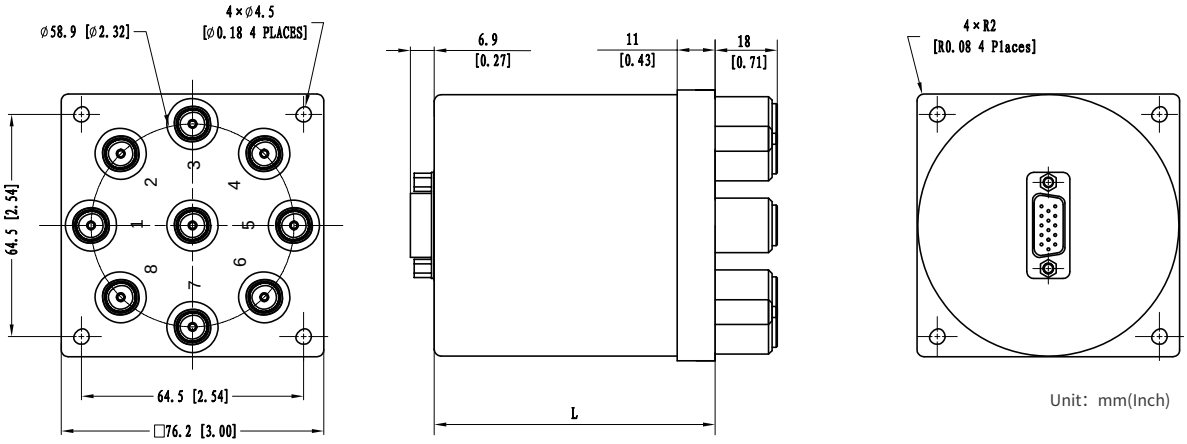
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 8GHz
- Low loss, Low VSWR, High Isolation
- N Female Connector
- Selectable TTL driver control

◆ Outline Drawing



Unit: mm(Inch)

L = 81.5(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: N Female

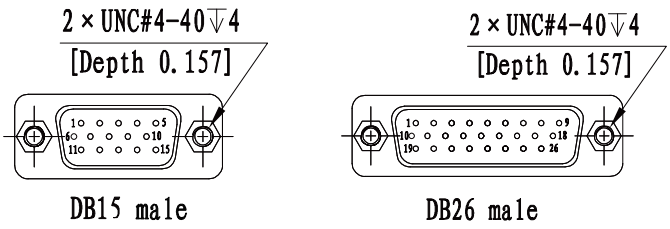
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15Pin Male

Weight: 1310g



DB15 male　　DB26 male

* No indication function, control interface DB15 Male.

◆ Truth Table

Normally open Non TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	V1		RF 1-0	RF 1-0
2	V2		RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0
4	V4		RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0
6	V6		RF 6-0	RF 6-0
7	V7		RF 7-0	RF 7-0
8	V8		-	RF 8-0
9	GND		-	-
10	Ind.1	Indicators	RF 1-0	RF 1-0
11	Ind.2		RF 2-0	RF 2-0
12	Ind.3		RF 3-0	RF 3-0
13	Ind.4		RF 4-0	RF 4-0
14	Ind.5		RF 5-0	RF 5-0
15	Ind.6		RF 6-0	RF 6-0
16	Ind.7		RF 7-0	RF 7-0
17	Ind.8		-	RF 8-0
18	Ind.com		-	-
19	VDC		-	-
20~26	N/A		-	-

Normally open TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	TTL		RF 1-0	RF 1-0
2	TTL		RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0
4	TTL		RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0
6	TTL		RF 6-0	RF 6-0
7	TTL		RF 7-0	RF 7-0
8	TTL		-	RF 8-0
9	VDC		-	-
10	GND		-	-
11	Ind.1	Indicators	RF 1-0	RF 1-0
12	Ind.2		RF 2-0	RF 2-0
13	Ind.3		RF 3-0	RF 3-0
14	Ind.4		RF 4-0	RF 4-0
15	Ind.5		RF 5-0	RF 5-0
16	Ind.6		RF 6-0	RF 6-0
17	Ind.7		RF 7-0	RF 7-0
18	Ind.8		-	RF 8-0
19	Ind.com		-	-
20~26	N/A		-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
		N	N			W			S	
E:Standard Series	7:SP7T 8:SP8T	N	Normally Open	06:DC~6GHz 08:DC~8GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	2:D-Sub 15 Male (3 rows) 5:D-Sub 26 Male (3 rows)

★ EXP：E7NN0605W00S2：Standard Series、SP7T、N、Normally Open、DC~6GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

SP9T-10T N 6GHz
High Power
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-4	0.3	70	1.3	350
4-6	0.4	70	1.6	300

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

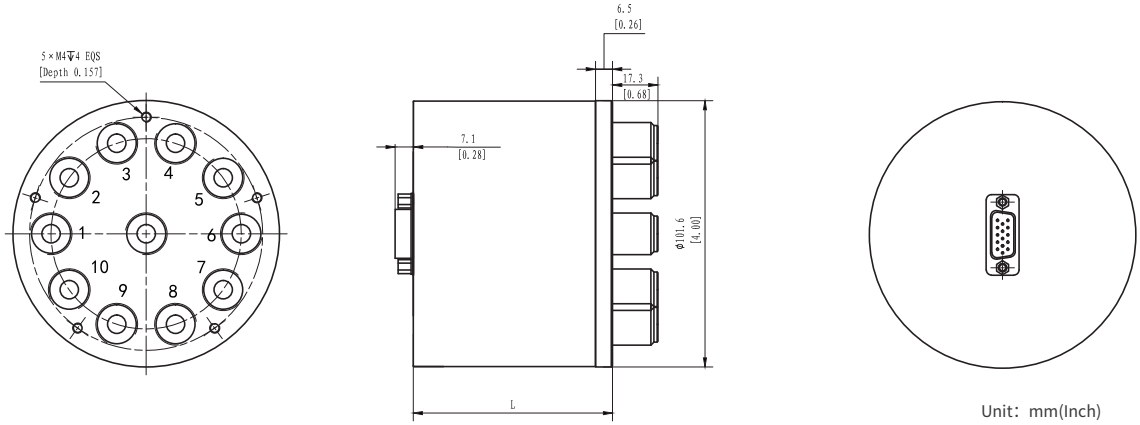
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

- DC to 6GHz
- Low loss, Low VSWR, High Isolation
- N Female Connector
- Selectable TTL driver control

◆ Outline Drawing



Unit: mm(Inch)

L = 76(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: N Female

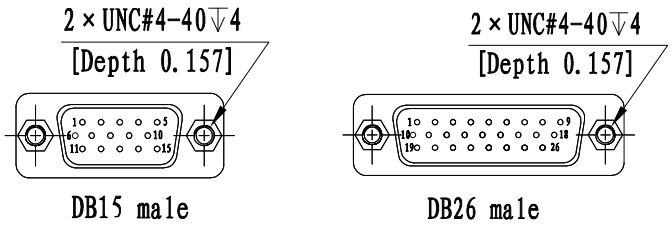
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15Pin Male

Weight: 2010g



◆ Truth Table

⋆ No indication function, control interface DB15 Male.

Normally open Non TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	V1		RF 1-0	RF 1-0
2	V2		RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0
4	V4		RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0
6	V6		RF 6-0	RF 6-0
7	V7		RF 7-0	RF 7-0
8	V8		-	RF 8-0
9	GND		-	-
10	Ind.1	Indicators	RF 1-0	RF 1-0
11	Ind.2		RF 2-0	RF 2-0
12	Ind.3		RF 3-0	RF 3-0
13	Ind.4		RF 4-0	RF 4-0
14	Ind.5		RF 5-0	RF 5-0
15	Ind.6		RF 6-0	RF 6-0
16	Ind.7		RF 7-0	RF 7-0
17	Ind.8		-	RF 8-0
18	Ind.com		-	-
19	VDC		-	-
20~26	N/A		-	-

Normally open TTL				
Actuator Terminals D-SUB 15/26Pin Male			RF Connector	
Pin No.	Define		SP7T	SP8T
1	TTL		RF 1-0	RF 1-0
2	TTL		RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0
4	TTL		RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0
6	TTL		RF 6-0	RF 6-0
7	TTL		RF 7-0	RF 7-0
8	TTL		-	RF 8-0
9	VDC		-	-
10	GND		-	-
11	Ind.1	Indicators	RF 1-0	RF 1-0
12	Ind.2		RF 2-0	RF 2-0
13	Ind.3		RF 3-0	RF 3-0
14	Ind.4		RF 4-0	RF 4-0
15	Ind.5		RF 5-0	RF 5-0
16	Ind.6		RF 6-0	RF 6-0
17	Ind.7		RF 7-0	RF 7-0
18	Ind.8		-	RF 8-0
19	Ind.com		-	-
20~26	N/A		-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
		N	N	06		W			S	
E:Standard Series	9:SP9T K:SP10T	N	Normally Open	DC~6GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	2:D-Sub 15 Male (3 rows) 5:D-Sub 26 Male (3 rows)

★ EXP：E9NN0612W00S2：Standard Series、SP9T、N、Normally Open、DC~6GHz、12V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

DPDT N 12.4GHz
High Power
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-5	0.3	70	1.3	350
5-12.4	0.5	60	1.5	250

◆ Product Functions

- DC to 12.4GHz
- Low loss, Low VSWR, High Isolation
- N Female Connector
- Selectable TTL driver control

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	350	200	180
	Latching	400	200	185

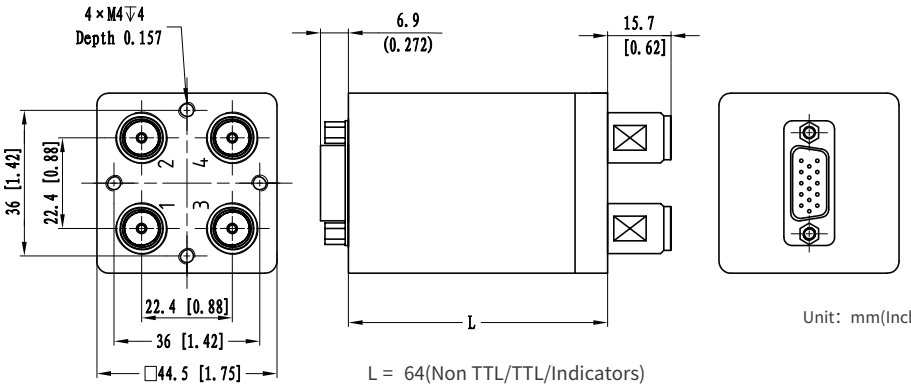
* It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

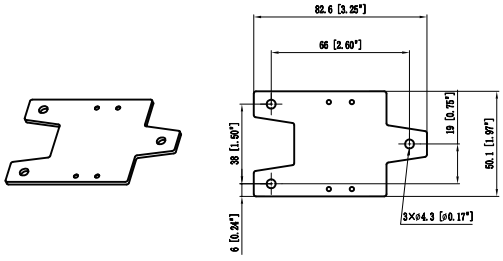
◆ Outline Drawing



L = 64(Non TTL/TTL/Indicators)

Unit: mm(Inch)

◆ Backplane



Unit: mm(Inch)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: N Female

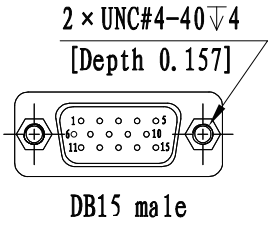
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15Pin Male

Weight: 380g



◆ Truth Table

Failsafe Non TTL			
Actuator Terminals / Solder Pins/D-SUB 15Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-2,3-4
1	GND		-
2	V		RF 1-3,2-4
3~11	N/A		-
12	VDC	Indicators	-
13	Ind.1		RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Failsafe TTL			
Actuator Terminals / Solder Pins/D-SUB 15Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-2,3-4
1	VDC		-
2	GND		-
3	TTL		RF 1-3,2-4
4~12	N/A		-
13	Ind.1	Indicators	RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Latching Non TTL			
Actuator Terminals / Solder Pins/D-SUB 15Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-2,3-4
2	V2		RF 1-3,2-4
3	GND		-
4~11	N/A		-
12	VDC	Indicators	-
13	Ind.1		RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

Latching TTL			
Actuator Terminals / Solder Pins/D-SUB 15Pin Male			RF Connector
Pin No.	Define		-
1	VDC		-
2	GND		-
3	TTL		RF 1-2,3-4
4	TTL		RF 1-3,2-4
5~12	N/A		-
13	Ind.1	Indicators	RF 1-2,3-4
14	Ind.2		RF 1-3,2-4
15	Ind.com		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
	D	N				W				2
E:Standard Series	DPDT	N	L:Latching F:Failsafe	06:DC~6GHz 08:DC~8GHz 12:DC~12.4GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	S:Normal B:Backplane	D-Sub 15 Male (3 rows)

★ EXP：EDNL0605W00S2：Standard Series、DPDT、N、Latching、DC~6GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

SPDT SC 6GHz
High Power
Failsafe / Latching

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	650

◆ Product Functions

- DC to 6GHz
- Low loss, Low VSWR, High Isolation
- SC Female Connector
- Selectable TTL driver control

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Failsafe	350	200	180
	Latching	400	200	185

⋆ It can be selected according to user requirements

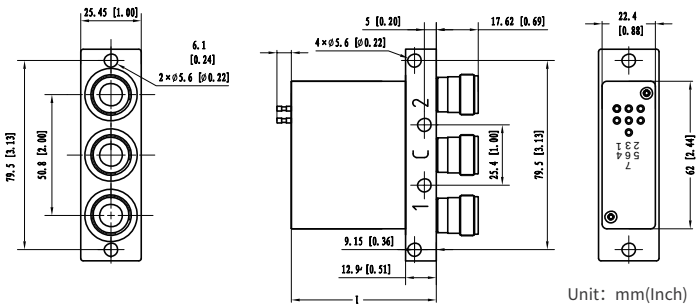
TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	20mA

Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

⋆ Connect VDC &GND before the function operates

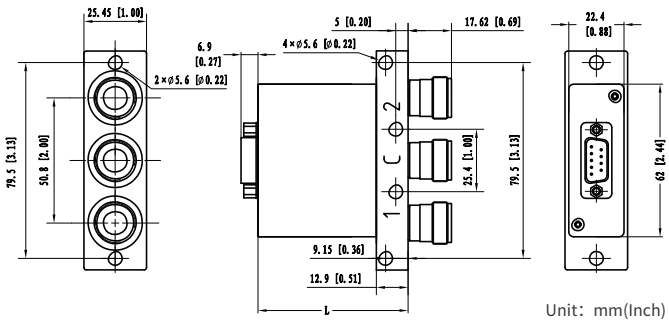
◆ Outline Drawing

Solder Pins



L = 61(Non TTL/TTL/Indicators)

D-SUB Male



L = 64(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SC Female

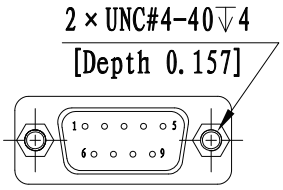
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: Solder Pins/D-SUB 9Pin Male

Weight: 240g



DB9 male

◆ Truth Table

Failsafe Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	V		RF 2-0
2	N/A		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Failsafe TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		No Power,RF 1-0
1	VDC		RF 2-0
2	TTL		-
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7~9	N/A		-

Latching Non TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	V1		RF 1-0
2	V2		RF 2-0
3	GND		-
4	Ind.1	Indicators	RF 1-0
5	Ind.2		RF 2-0
6	Ind.com		-
7	VDC		-
8~9	N/A		-

Latching TTL			
Actuator Terminals Solder Pins/D-SUB 9Pin Male			RF Connector
Pin No.	Define		-
1	VDC		
2	TTL		RF 1-0
3	GND		-
4	TTL		RF 2-0
5	Ind.1	Indicators	RF 1-0
6	Ind.2		RF 2-0
7	Ind.com		-
8~9	N/A		-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E	2	C		06		W			S	
Standard Series	SP2T	SC	L:Latching F:Failsafe	DC~6GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 3:Self Cutoff 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	0:Solder Pins 1:D-Sub 9 Male (2 rows)

★ EXP：E2CL0605W00S0：Standard Series、SP2T、SC、Latching、DC~6GHz、5V、Non Terminated、Negative common、Standard、Normal、Solder Pins.

SP6T SC 6GHz
High Power
Normally open

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	650

◆ Product Functions

- DC to 6GHz
- Low loss, Low VSWR, High Isolation
- SC Female Connector
- Selectable TTL driver control

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12	24	28
Coil Current (mA)	Normally open	300	150	140

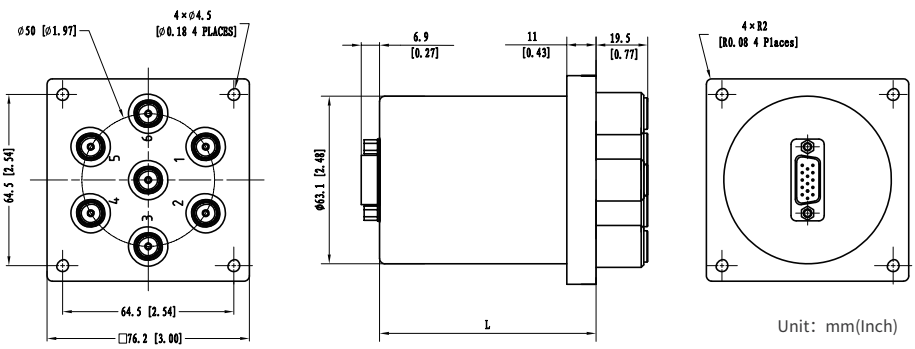
⋆ It can be selected according to user requirements

TTL	TTL Low(V)	TTL High	
	0-0.3	3~5V	1.4mA

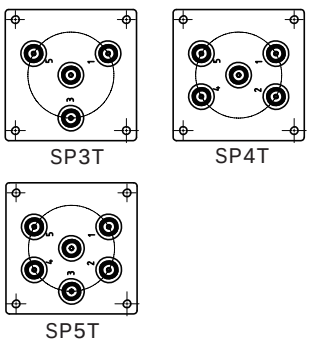
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

⋆ Connect VDC &GND before the function operates

◆ Outline Drawing



Unit: mm(Inch)



L = 81.5(Non TTL/TTL/Indicators)

◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SC Female

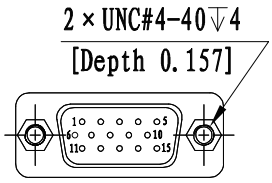
Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15Pin Male

Weight: 700g



DB15 male

◆ Truth Table

Normally open Non TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	V1		RF 1-0	-	RF 1-0	RF 1-0
2	V2		-	RF 2-0	RF 2-0	RF 2-0
3	V3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	V4		-	-	RF 4-0	RF 4-0
5	V5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	V6		-	RF 6-0	-	RF 6-0
7	GND		-	-	-	-
8	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
9	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
10	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
11	Ind.4		-	-	RF 4-0	RF 4-0
12	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
13	Ind.6		-	RF 6-0	-	RF 6-0
14	Ind.com		-	-	-	-
15	VDC		-	-	-	-

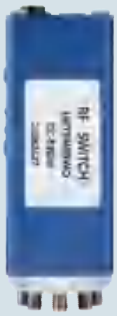
Normally open TTL						
Actuator Terminals D-SUB 15Pin Male			RF Connector			
Pin No.	Define		SP3T	SP4T	SP5T	SP6T
1	TTL		RF 1-0	-	RF 1-0	RF 1-0
2	TTL		-	RF 2-0	RF 2-0	RF 2-0
3	TTL		RF 3-0	RF 3-0	RF 3-0	RF 3-0
4	TTL		-	-	RF 4-0	RF 4-0
5	TTL		RF 5-0	RF 5-0	RF 5-0	RF 5-0
6	TTL		-	RF 6-0	-	RF 6-0
7	VDC		-	-	-	-
8	GND		-	-	-	-
9	Ind.1	Indicators	RF 1-0	-	RF 1-0	RF 1-0
10	Ind.2		-	RF 2-0	RF 2-0	RF 2-0
11	Ind.3		RF 3-0	RF 3-0	RF 3-0	RF 3-0
12	Ind.4		-	-	RF 4-0	RF 4-0
13	Ind.5		RF 5-0	RF 5-0	RF 5-0	RF 5-0
14	Ind.6		-	RF 6-0	-	RF 6-0
15	Ind.com		-	-	-	-

◆ Product Selection

Series	Number Of Positions	Rf Connectors	Type	Frequency	Actuator Voltage	Terminated	Driver	Operating Temperature	Install	Control connector
E		C	N	06		W			S	2
Standard Series	3:SP3T 4:SP4T 5:SP5T 6:SP6T	SC	Normally open	DC~6GHz	05:5V 12:12V 24:24V 28:28V	Non Terminated	0:Negative common 1:TTL Driver 2:Positive Common 4:Negative common And Indicators 5:TTL driver And Indicators 6:Positive Common And Indicators	0:Standard (-25°C~65°C) 1:Extended1 (-45°C~85°C) 2:Extended2 (-55°C~85°C)	Normal	D-Sub 15 Male (3 rows)

★ EXP：E3CN0605W00S2：Standard Series、SP3T、SC、Normally open、DC~6GHz、5V、Non Terminated 、Negative common、Standard 、Normal、D-Sub 15 Male.

Smart



▶ **Smart**

SP6T 18/26.5/40/43.5/50/53GHz

▶ **Smart**

SP8T 18/26.5/40GHz

▶ **Smart**

Miniaturized Switch Matrix

▶ **Smart**

Miniaturized Switch Matrix

▶ **Smart**

Miniaturized Switch Matrix

◆ Specifications

- Miniaturized
- Low High Cost Performance
- Touchable Screen Interface Design
- Provide Remote Control Interface And Instructions
- Simple Operation

SP6T 18/26.5/40/43.5/ 50/53GHz

USB

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	70	1.4	30
12-18	0.5	60	1.5	25
18-26.5	0.7	55	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5
40-43	1.0	50	2.0	4
43-50	1.2	50	2.2	3
50-53	1.3	50	2.2	2

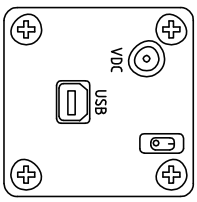
◆ Product Functions

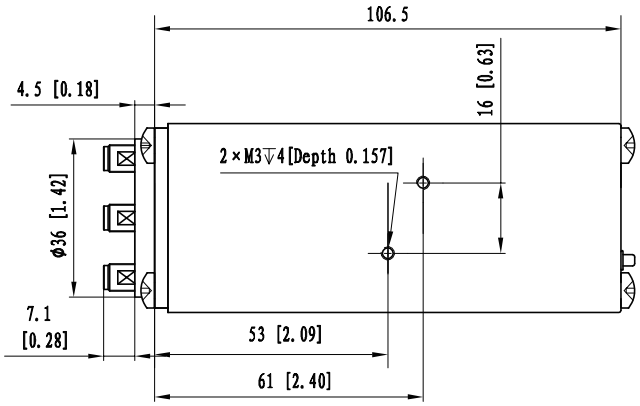
- DC to 53GHz
- Low loss, Low VSWR, High Isolation
- SMA/2.92/1.85 Connector
- Channel Indicator Light Function

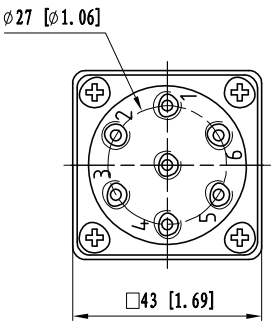
◆ Operating Voltage/Coil Current

Operating Voltage(V)		12
Coil Current(mA)	Normally open	300

◆ Outline Drawing







◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA/2.92/1.85

Impedance: 50Ω

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: USB

Weight: 295g

SP8T 18/26.5/40GHz
USB

◆ RF Characteristics

Frequency (GHz)	Ins.loss (dB)	Isolation (dB)	VSWR	RF Power CW (W)
DC-6	0.3	70	1.3	40
6-12	0.4	60	1.4	30
12-18	0.5	55	1.5	25
18-26.5	0.7	50	1.7	12
26.5-32	0.8	50	1.8	8
32-40	0.9	50	1.9	5

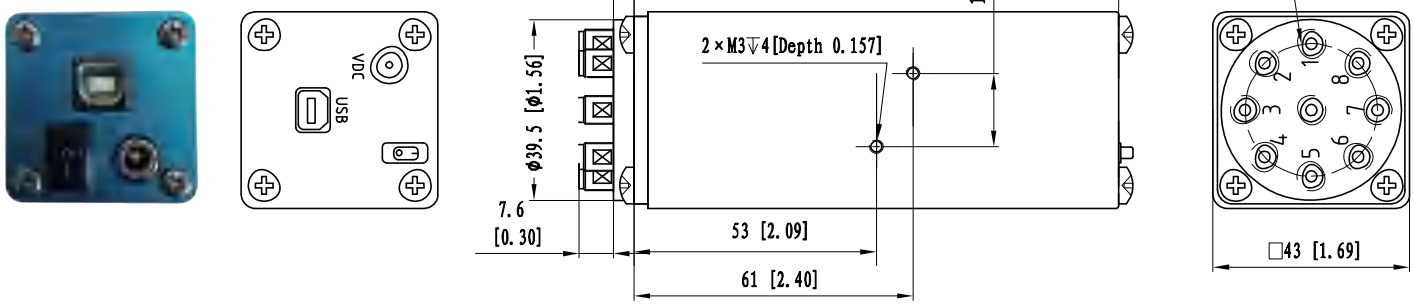
◆ Product Functions

- DC to 40GHz
- Low loss, Low VSWR, High Isolation
- SMA/2.92 Connector
- Channel Indicator Light Function

◆ Operating Voltage/Coil Current

Operating Voltage(V)		12
Coil Current(mA)	Normally open	300

◆ Outline Drawing



◆ Specifications

Switching Sequence: Break before Make

Switching Time: 15ms max

Storage temperature: -55°C~85°C

Operating temperature: -25°C~65°C(Standard)
-45°C~85°C(Extended1)
-55°C~85°C(Extended2)

Mechanical Life Cycles: 2 million cycles

RF Connectors: SMA/2.92

Impedance: 50Ω

Actuator Terminals: USB

Weight: 300g

Mechanical Shock,Non-Operating: 50G、1/2 Sine、11 ms

Vibration Operating: 20-2000 Hz、10G RMS

Miniaturized Switch Matrix

◆ Specifications

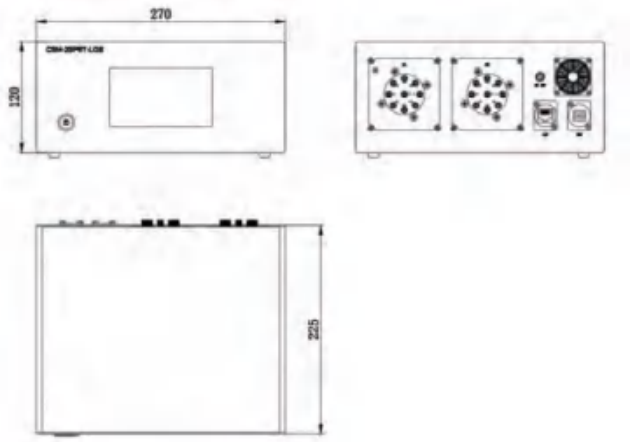
Item	Specifications	Note
Ins.loss of any single link	＜0.5dB	DC-18GHz Subject to switch selection
VSWR of any single link	＜1.6	
Isolation between any two ports	⩾70dB	

◆ Application

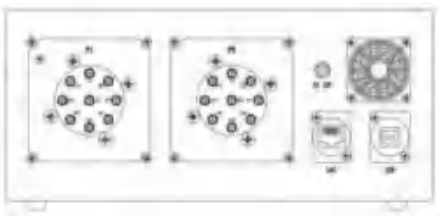
- Laboratory Testing
- Automatic Test Equipment
- Production Line Test

◆ Product Size

Outline Drawing



Rear Panel Diagram



◆ Specification

Switch Sequence: DC-67GHz(Customizable Design)

Matrix Combination：Include Several SPDT, SPnT(Customizable Design)

RF Connector：SMA/N/3.5/2.92/2.4/1.85 Female(Customizable Design)

Actuator Voltage：DC 24V(Customizable Design)

Impedance：50Ω

Mechanical Life Cycles:2 Million Cycles(Cold Switching, Switch Type Association)

Size：150mm×110mm×60mm(Customizable Design)

Driver:Remote Control:USB,LAN,Provide Complete Control Instructions

Single Channel Conduction Time：⩽30ms（Matrix Combination Form Association）

Other

Other

▶ High Performance

▶ Low PIM

▶ Very High Power

▶ Low Temperature

Miniaturized Switch Matrix

Miniaturized Switch Matrix