

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

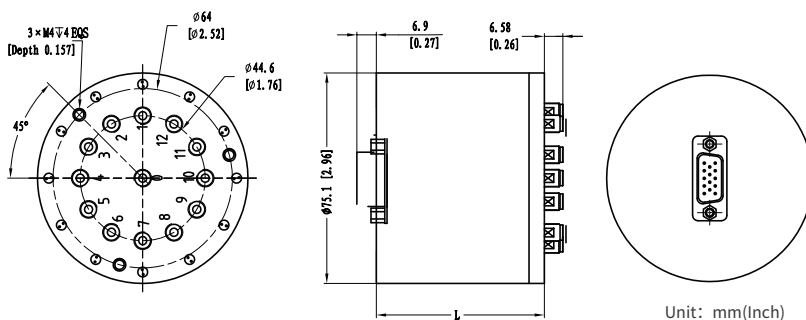
* It can be selected according to user requirements

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

◆ Outline Drawing



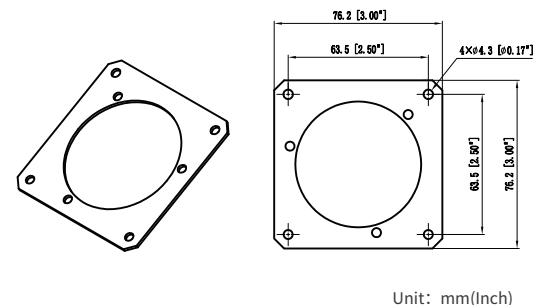
L = 61.5(Non TTL/TTL/Indicators)



◆ Product Functions

- DC to 18GHz
- Low loss, Low VSWR, High Isolation
- SMA 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: SMA Female

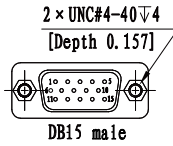
Impedance: 50Ω

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		RF Connector	
D-SUB 15Pin Male			
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		RF Connector	
D-SUB 15Pin Male			
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	-	-

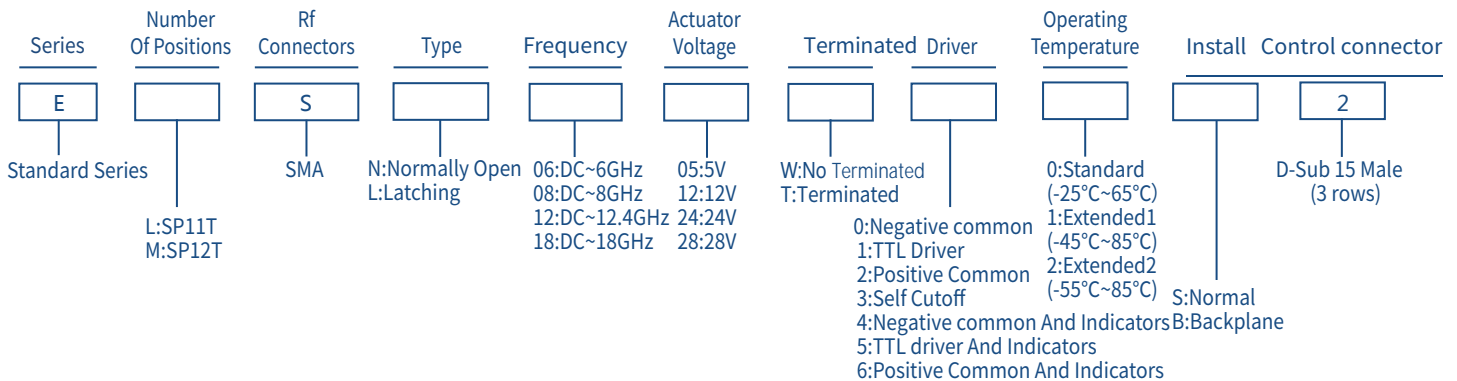
Latching Non TTL			
Actuator Terminals		RF Connector	
D-SUB 15Pin Male			
Pin No.	Define	SP11T	SP12T
1	V1	RF 1-0	RF 1-0
2	V2	RF 2-0	RF 2-0
3	V3	RF 3-0	RF 3-0
4	V4	RF 4-0	RF 4-0
5	V5	RF 5-0	RF 5-0
6	V6	RF 6-0	RF 6-0
7	V7	RF 7-0	RF 7-0
8	V8	RF 8-0	RF 8-0
9	V9	RF 9-0	RF 9-0
10	V10	RF 10-0	RF 10-0
11	V11	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		RF Connector	
D-SUB 15Pin Male			
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



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