

# SP7T-8T 18GHz

Load  
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

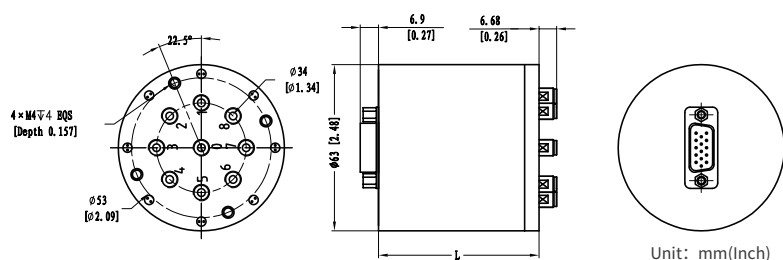
\* It can be selected according to user requirements

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

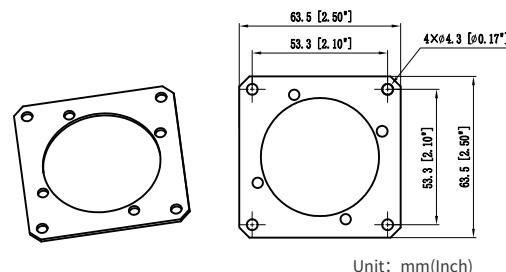
\* Connect VDC & GND before the function operates

## ◆ Outline Drawing



L = 61.5(Non TTL/TTL/Indicators)

## ◆ Backplane



## ◆ Product Functions

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

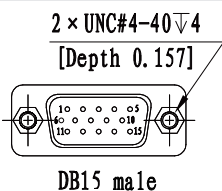
Impedance: 50Ω

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

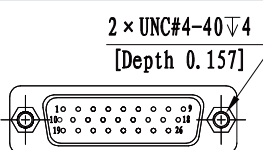
Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15/26Pin Male

Weight: 320G



DB15 male



DB26 male

◆ Truth Table

\* No indication function, control interface DB15 Male.

Normally open Non TTL			
Actuator Terminals		RF Connector	
D-SUB 15/26Pin Male			
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	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		RF Connector	
D-SUB 15/26Pin Male			
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	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	-	-

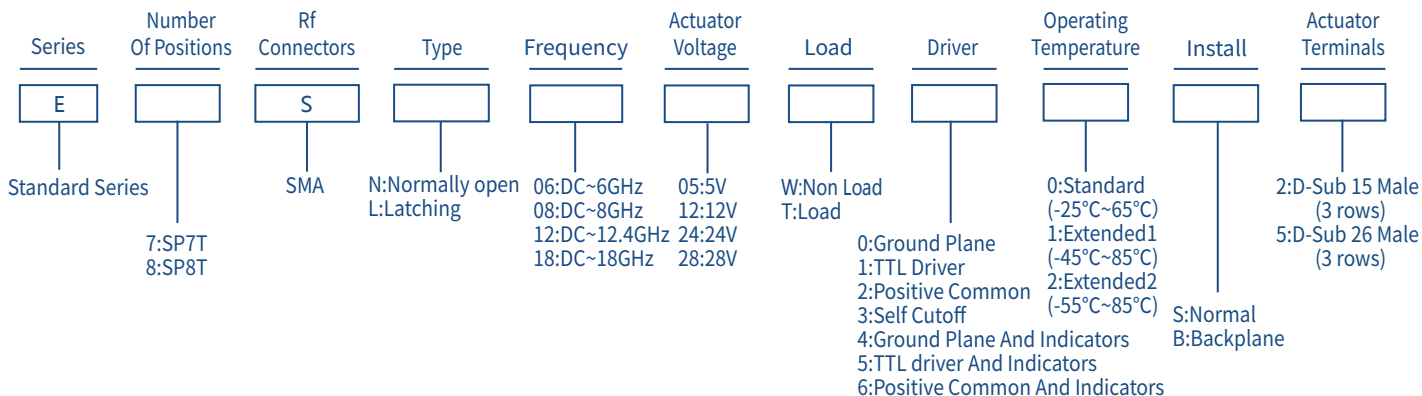
Latching Non TTL			
Actuator Terminals		RF Connector	
D-SUB 15/26Pin Male			
Pin No.	Define	SP7T	SP8T
1	V1	RF 1-0	RF 1-0
2	V2	RF 2-0	RF 2-0
3	V3	RF 3-0	RF 3-0
4	V4	RF 4-0	RF 4-0
5	V5	RF 5-0	RF 5-0
6	V6	RF 6-0	RF 6-0
7	V7	RF 7-0	RF 7-0
8	V8	-	RF 8-0
9	V (RESET)	-	-
10	GND	-	-
11	Ind.1	RF 1-0	RF 1-0
12	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	-	-

Latching TTL			
Actuator Terminals		RF Connector	
D-SUB 15/26Pin Male			
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	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!

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◆ Product Selection



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