www.dbdesignmw.com
Email:salesrf@db.design

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

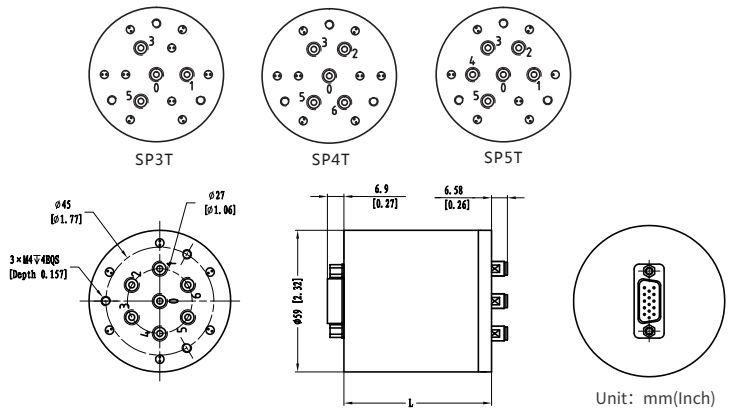
Indicators	Withstand Voltage V (max)	Current capacity mA (max)	Resistance Ω (max)
	50	100	15

* Connect VDC &GND before the function operates

◆ Product Functions

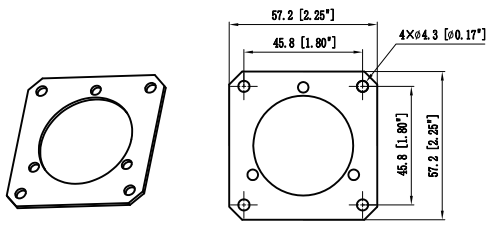
- DC to 18GHz
- Low loss, Low VSWR, High Isolation
- SMA Connector
- Selectable TTL driver control

◆ 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

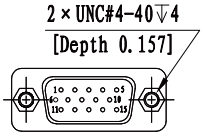
Impedance: 50Ω

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

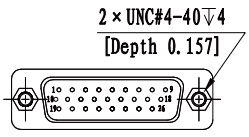
Vibration Operating: 20-2000 Hz、10G RMS

Actuator Terminals: D-SUB 15/26Pin Male

Weight: 260g



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		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:No 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.