

Normally Open

❖ Features

- DC-18 GHz
- Low VSWR
- Low Loss
- High Isolation
- SMA(f) connectors

❖ RF Characteristics

Frequency	Ins. Loss	Isolation	VSWR	Average Power
GHz	dB	dB		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
Current (mA)	Normally Open	300	150	140

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

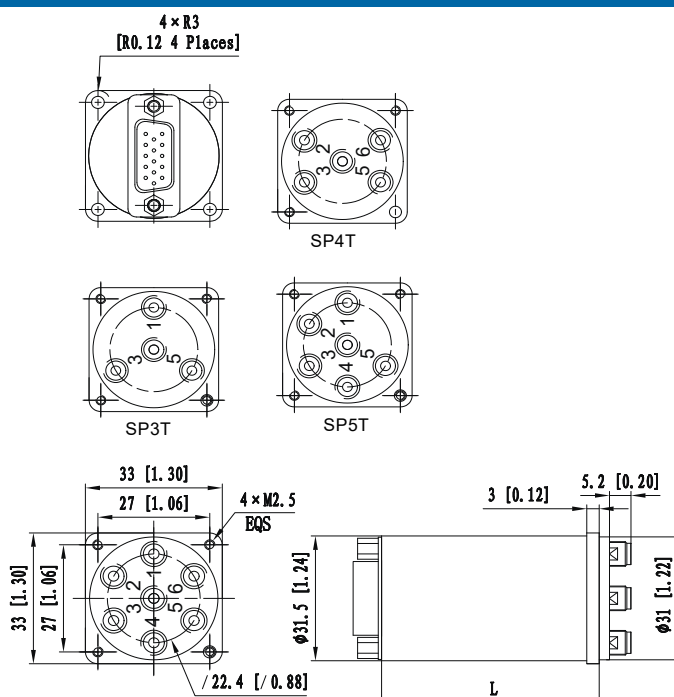
Indicator Rating	V(max)	mA(max)	Ω(max)
	50	100	15

\* +Vdc and GND must be connected to operate

❖ Specifications

Frequency Range	DC-18 GHz
Impedance	50 Ohms
Switching Sequence	Break Before Make
Switching Time	15mS max
Operating Life	2 million cycles
Shock, Non-operating	50G, ½ Sine, 11ms
Vibration, Operating	20-2000Hz, 10G RMS
RF Interface	SMA female
Control Connector	Solder pins/D-SUB 15Pin Male
Storage Temperature	-55°C~+85°C
Operating Temperature	-25°C~+65°C (Standard)
	-45°C~+85°C (Extended Temp. 1)
	-55°C~+85°C (Extended Temp. 2)
Weight	120g

❖ Outline Drawing[mm[inch]]



L=67.5 (W.O. TTL / W. TTL / IND)

❖ Ordering Information

No. of Throws	CONNECTOR	Actuator	Frequency	Voltage	Special Options	Temperature	Actuator Terminals
X	TCSX - S	N	6	12	1	0	1
R: SP3T Mini	S: SMA(f)	N: Normally Open	6: DC~6GHz	5: 5V	0: Ground Plane	0: Standard	0: Solder pins
S: SP4T Mini			8: DC~8GHz	12: 12V	1: TTL Driver	1: -45~+85°C	1: D-SUB 15PIN Male
T: SP5T Mini			12: DC~12.4GHz	24: 24V	2: Positive Common	2: -55~+85°C	
U: SP6T Mini			18: DC~18GHz	28: 28V	3: Ground Plane + IND		
					4: TTL Driver + IND		
					5: Positive Common + IND		

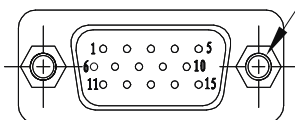
(IND=Indicators)

Please feel free to contact us for more information regarding additional options and custom configurations

Normally Open

2 × UNC#4-40▽4

[Depth 0.157]



DB15 male

Truth Table

**NORMALLY OPEN W/O TTL**

D-SUB 15Pin Male	Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Description	V1	V2	V3	V4	V5	V6	GND	IND 1	IND 2	IND 3	IND 4	IND 5	IND 6	IND COM	VDC
RF Path	SP3T	RF 1-0	-	RF 3-0	-	RF 5-0	-	-	RF 1-0	-	RF 3-0	-	RF 5-0	-	-	-
	SP4T	-	RF 2-0	RF 3-0	-	RF 5-0	RF 6-0	-	-	RF 2-0	RF 3-0	-	RF 5-0	RF 6-0	-	-
	SP5T	RF 1-0	RF 2-0	RF 3-0	RF 4-0	RF 5-0	-	-	RF 1-0	RF 2-0	RF 3-0	RF 4-0	RF 5-0	-	-	-
	SP6T	RF 1-0	RF 2-0	RF 3-0	RF 4-0	RF 5-0	RF 6-0	-	RF 1-0	RF 2-0	RF 3-0	RF 4-0	RF 5-0	RF 6-0	-	-

**NORMALLY OPEN W/ TTL**

D-SUB 15Pin Male	Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	Description	TTL	TTL	TTL	TTL	TTL	TTL	VDC	GND	IND 1	IND 2	IND 3	IND 4	IND 5	IND 6	IND COM
RF Path	SP3T	RF 1-0	-	RF 3-0	-	RF 5-0	-	-	-	RF 1-0	-	RF 3-0	-	RF 5-0	-	-
	SP4T	-	RF 2-0	RF 3-0	-	RF 5-0	RF 6-0	-	-	-	RF 2-0	RF 3-0	-	RF 5-0	RF 6-0	-
	SP5T	RF 1-0	RF 2-0	RF 3-0	RF 4-0	RF 5-0	-	-	-	RF 1-0	RF 2-0	RF 3-0	RF 4-0	RF 5-0	-	-
	SP6T	RF 1-0	RF 2-0	RF 3-0	RF 4-0	RF 5-0	RF 6-0	-	-	RF 1-0	RF 2-0	RF 3-0	RF 4-0	RF 5-0	RF 6-0	-

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