Single-Pole-Multi-Throw (SP3T-SP6T)

Normally Open - 2.92mm - DC to 40GHz

EPX microwave inc.

Features:

- Broadband: DC - 40 GHz
- Extended Life: 2 million cycles
- Excellent Repeatability
- Low Insertion Loss
- Available in 3, 4, 5 or 6 Positions

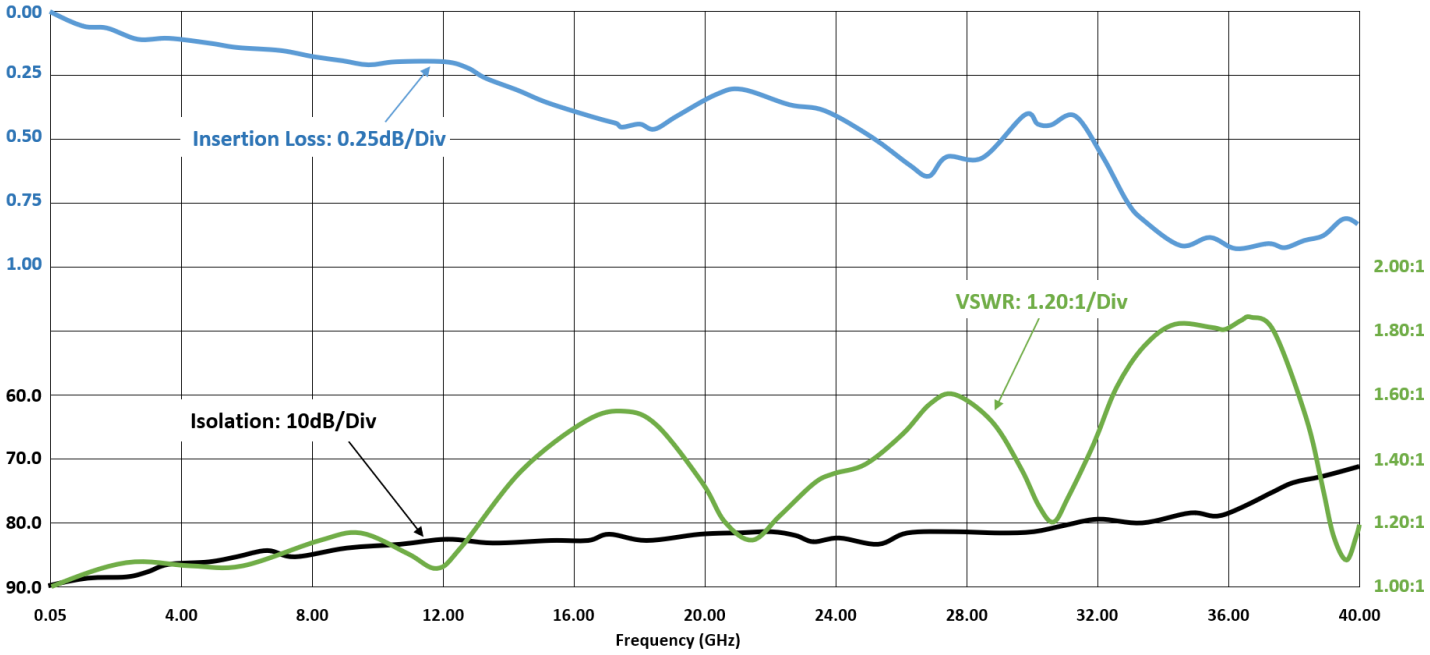
Note: See series SP3T-SP6T Option T for 50Ω terminations

RF Specification:

Frequency, (GHz)	DC-12	12-26	26-32	32-40
Ins. Loss dB (max)	0.30	0.60	0.80	1.00
Isolation dB (min)	80	80	80	70
VSWR (max)	1.25:1	1.60:1	1.70:1	1.90:1
Switching Time	20 mS (max)			
Switching Action	Break-Before-Make			
Impedance	50 Ω			

Description:

Broadband frequency coverage and high reliability makes these switches ideal for all testing applications. Selected position remains active with constant voltage, all positions are open when voltage is removed. Good low to medium power handling. **Applications:** lab testing to production ATE requirements. **Markets:** defense, telecom, aerospace, enterprise and 5G.



Specifications	
Oper Temp	-25° C to +70° C
Oper Temp	-54° C to +85° C (M version)
Storage Temp	-55° C to +100° C
Humidity	Moisture resistant or immersion sealing available
Shock	MIL-STD-202 Method 213, Condition D, 500G (non oper)
Vibration	MIL-STD-202 Method 214, Condition D, 10G RMS (non oper)
Cycle Life	2M cycles (may vary based on selected options)

Voltages and Current				
Nominal Voltage, Vdc	12	15	24	28
Voltage Range, Vdc	11-13	14-16	22-26	26-30
Current (mA)*	250	200	150	140

** at nominal voltage and +20°C*

Popular Models	
SP3T-9E-40A	SP3T, K connector, Normally Open, DC-40GHz, 12VDC
SP3T-9E-40A-D	SP3T, K connector, Normally Open, DC-40GHz, 12VDC, TTL
SP4T-9E-40A	SP4T, K connector, Normally Open, DC-40GHz, 12VDC
SP4T-9E-40A-D	SP4T, K connector, Normally Open, DC-40GHz, 12VDC, TTL
SP6T-9E-40A	SP6T, K connector, Normally Open, DC-40GHz, 12VDC
SP6T-9E-40A-D	SP6T, K connector, Normally Open, DC-40GHz, 12VDC, TTL

- See backside for a full list of available features and options
- Contact us for high power and custom designs

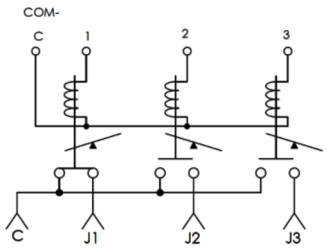
ISO 9001

RoHS Compliant

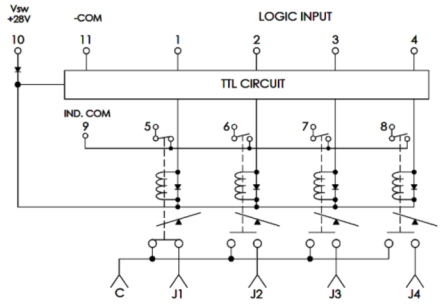
Single-Pole-Multi-Throw (SP3T-SP6T)

Normally Open - 2.92mm - DC to 40GHz

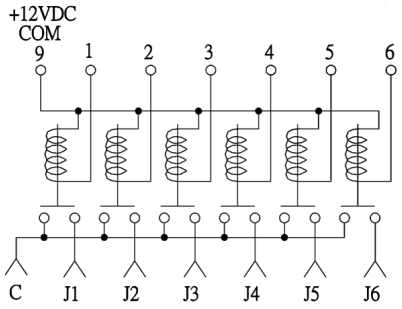
Schematics



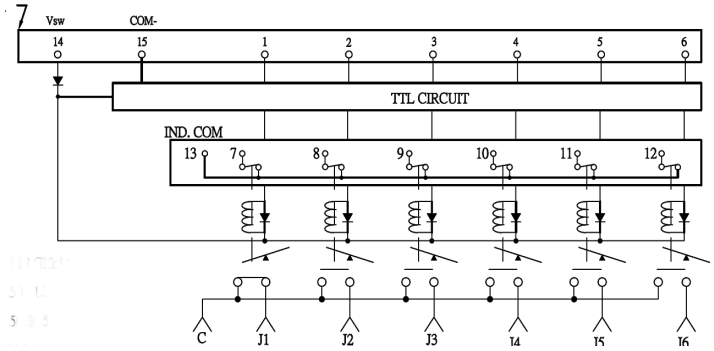
(SP3T) Position #1 Energized



(SP4T w/ TTL & Indicators) Position #1 Energized

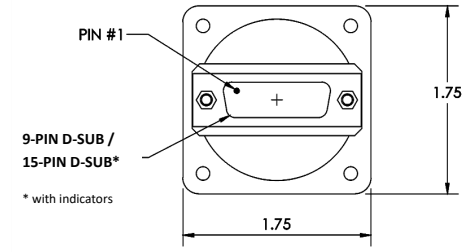


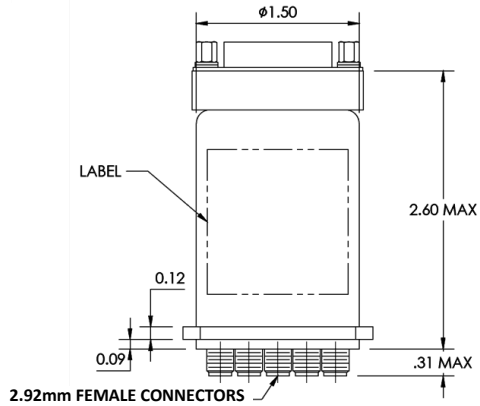
(SP6T) +Common, All Positions Open

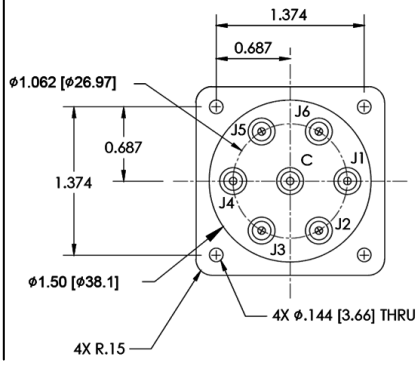


(SP6T w/TTL & Indicators) Position #1 Energized

Outline







Model Numbering System

Example: SP3T-9E-40A-D

(SP3T, K Connector, Normally Open without indicator, DC-40GHz, 12VDC, TTL Driver, D-Sub Control)

S P 3 T - 9 E - 4 0 A - D - __

No. of Outputs
3 : SP3T
4 : SP4T
5 : SP5T
6 : SP6T

Control Options
Default : D-Sub Control
PIN : Pin Terminal Control

Connector Type	
0: SMA	6: SMB
1: N	7: 7/16 DIN
2: TNC	8: BNC
3: RF PIN	9: K (2.92mm)
4: F (75Ω)	10: Mini DIN
5: SC	

Actuator Type
E : Normally Open without Indicator
F : Normally Open with Indicator

Frequency Range
03 : DC-3GHz
08 : DC-8GHz
12 : DC-12GHz
18 : DC-18GHz
22 : DC-22GHz
26 : DC-26.5GHz
40 : DC-40GHz

Actuator Voltage	
A : 12VDC	E : 20VDC
B : 15VDC	F : 5VDC
C : 28VDC	G: 18VDC
D : 24VDC	

Options
D : TTL Driver
E : Decoder
H : High Power
I : Suppression Diodes
P : Positive + Common
Y : Moisture Seal
C: Custom

RoHS Compliant

ISO 9001

* D-Sub connectors are standard for SPMT, no designation on model number needed