

Features:

- Broadband: DC - 40 GHz
- Extended Life: 1 million cycles
- Excellent Repeatability
- Low Insertion Loss
- 50Ω Internal Terminations
- Available in 7 or 8 Positions

RF Specification:

Frequency, (GHz)	DC-6	6-12	12-18	18-26.5	26.5-40
Ins. Loss dB (max)	0.3	0.4	0.6	0.8	1.5
Isolation dB (min)	80	70	70	70	70
VSWR (max)	1.20:1	1.30:1	1.50:1	2.00:1	2.20:1
Switching Time	20 mS (max)				
Switching Action	Break-Before-Make				
Impedance	50Ω (Switch and Terminations)				

Description:

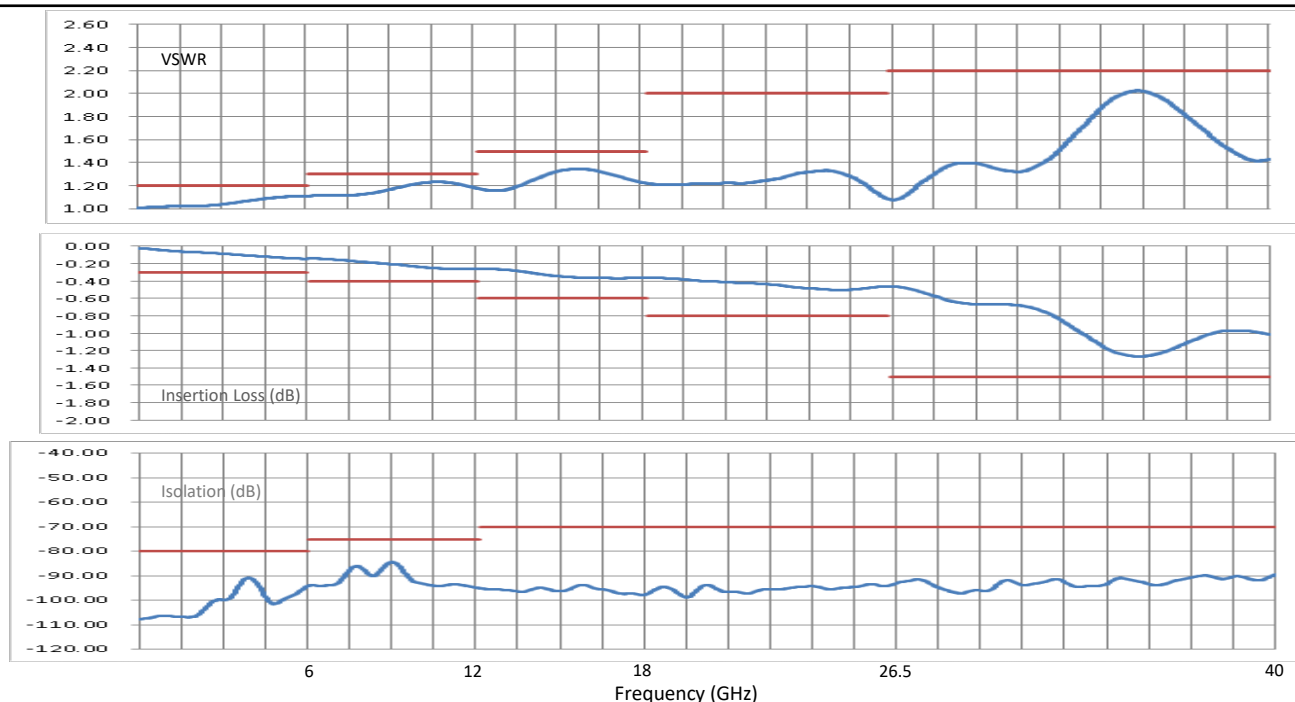
Internal 50 ohm terminations ensure good isolation in the "off" state regardless of the match to which the switch is connected. High reliability and low loss performance makes these switches ideal for all testing applications. Magnetically latched in place after control voltage is removed.

Applications: lab testing and production ATE requirements.

Markets: defense, telecom, aerospace, enterprise, consumer and IoT.



Preliminary



Specifications

Oper Temp	-25° C to +65° 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	1M cycles (may vary based on selected options)

Voltages and Current

Nominal Voltage, Vdc	12	24	28
Voltage Range, Vdc	11-13	22-26	24-30
Set Current (mA)*	280	150	105
Reset Current (mA) * (SP8T)	2240	1200	840

Popular Models

SP7T-9C-40A-T	SP7T, K, Latching, DC-40GHz, 12VDC, Internal Termination
SP8T-9C-40A-T	SP8T, K, Latching, DC-40GHz, 12VDC, , Internal Termination
SP8T-9C-40A-TD	SP8T, K, Latching, DC-40GHz, 12VDC, Internal Termination, TTL
SP8T-9D-40A-T	SP8T, K, Latching, DC-40GHz, 12VDC, Internal Termination , Indicator

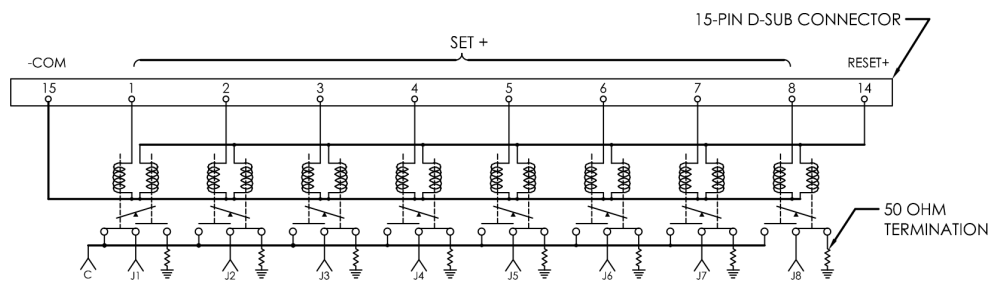
- See backside for a full list of available features and options

- Contact us for high power and custom designs

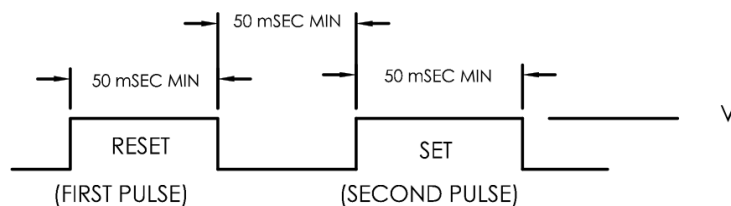
Note: Reset current = Current rating x (# of positions)

* at nominal voltage and +20°C

Schematics



SP8T: 50Ω terminations, 15 pin D-Sub (Coil 1 shown last energized)

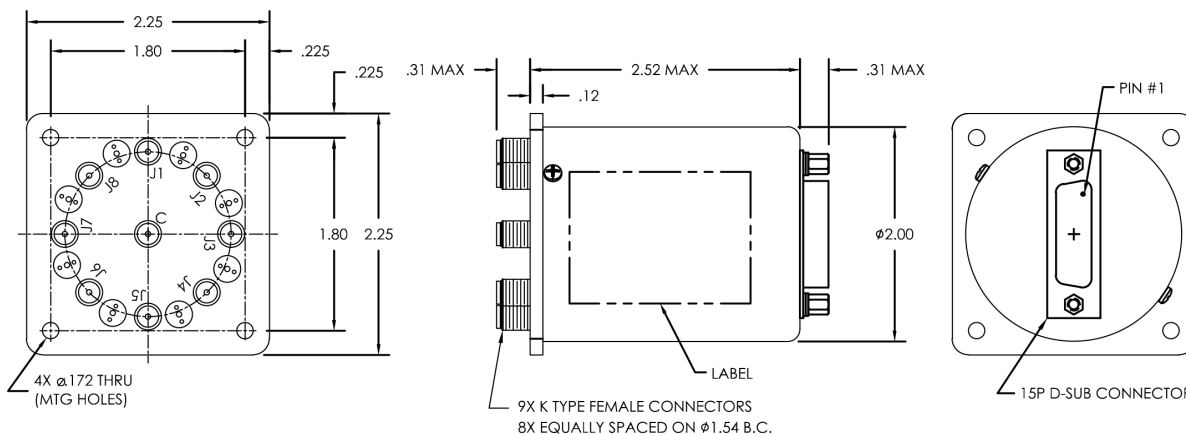


Switching Operation

TTL Control

Logic "1": 2.4 to 5.0 VDC
Logic "0": 0 to 0.8 VDC

Outline



Model Numbering System

Example: SP8T-9C-40A-T

(SP8T, K Connector, Latching without indicator, DC-40GHz, 12VDC, Internal Termination, D-Sub Control)

