



# SP3T Coaxial Switches

Normally open, DC to 18 GHz, SMA, TTL, D-SUB, Electronic Type Indicator

## Electrical Characteristics:

Parameter	条件Condition
Frequency range	DC-18GHz
Impedance	50 Ω
Operation mode	Normally open
Switch sequence	Break before make
Switching time	15 ms max
Mechanical life	1 million min
TTL input	0-0.8 V(OFF), 2.4-5 V(ON)
Rated voltage	12 24 28 VDC
Operating current at 23 °C	290 150 140 mA
Indicator rating	Electronic Type Indicator Max withstand voltage: 60VDC Max current capacity: 100mA Max "ON" resistance:16Ω Note: +VDCi and COM- must be connected to operate.



## RF Specifications:

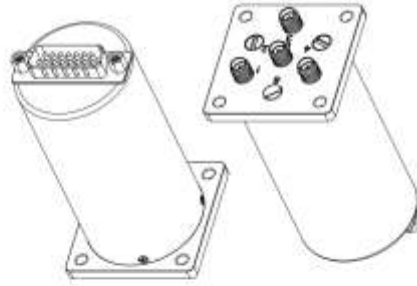
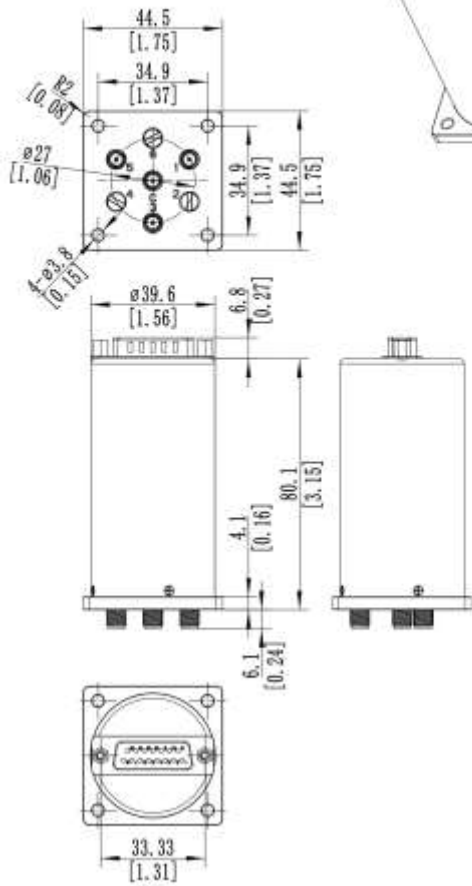
FREQUENCY RANGE (GHz)	DC-6	6-12	12-18
INSERTION LOSS (MAX) dB	0.3	0.4	0.5
ISOLATION (MIN) dB	70	60	60
V.S.W.R. (MAX)	1.3:1	1.4:1	1.5:1

## Environmental and Physical Characteristics:

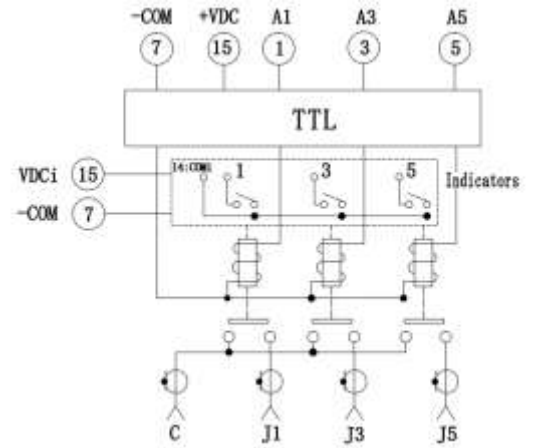
Parameter	Condition
Operating temperature range	-25°C to +65°C (Standard) -55°C to +85°C (Optional)
Sine vibration (Operating)	20-2000Hz , 10g
Shocks (Non Operating)	50g / 12ms, ½ sine
RF Connector type	SMA Female
Control connector	D-SUB 15Pin Male
Weight	190g Max

## Outline Drawing:

Unit: mm



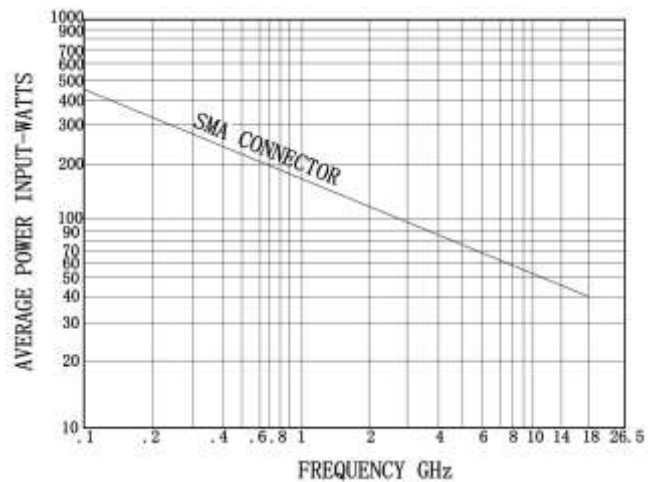
## Schematic:



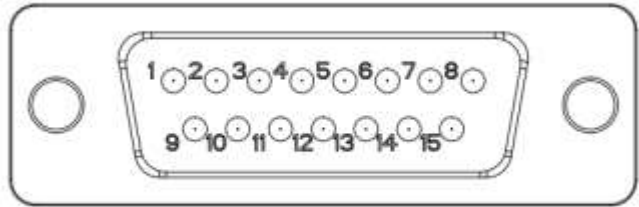
## Average Power:

This graph is based on the following conditions:

- Ambient temperature: + 25 °C
- Sea level
- V.S.W.R.: 1 and cold switching



**Pin Definition:**



15 PIN D-SUB		RF Connect Used
Pin NO.	Function	SP3T
1	A1(TTL IN)	1
2	UNUSED	
3	A3(TTL IN)	3
4	UNUSED	
5	A5(TTL IN)	5
6	UNUSED	
7	-COM	
8	1(IND.)	J1-C
9	UNUSED	
10	3(IND.)	J3-C
11	UNUSED	
12	5(IND.)	J5-C
13	UNUSED	
14	COMi(IND)(V+)	
15	+VDC/VDCi	

**Part Number:**

Part Number	Rated Voltage	Option
SP3T		
GPSWSP3TODSMATI-12-18	12VDC	-S (-55°C- +85°C)
GPSWSP3TODSMATI-24-18	24VDC	
GPSWSP3TODSMATI-28-18	28VDC	