

SPDT Coaxial Switches  
 N, Failsafe, TTL, DC to 12.4 GHz,  
 DSUB-9, Electronics Type Indicator  
 LF-SPDT-N-F-12VDC-12.4G  
 LF-SPDT-N-F-24VDC-12.4G  
 LF-SPDT-N-F-28VDC-12.4G



### Electrical Characteristics:

Parameter	Condition
Frequency range	DC-12.4GHz
Impedance	50 Ω
Operation mode	Failsafe
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	270 150 110 mA
Indicator rating	Electronic Type Indicator Max withstand voltage: 60VDC Max current capacity: 100mA Max "ON" resistance:16Ω Note: VDC(i) and COM- must be connected to operate.

### RF Specifications:

FREQUENCY RANGE(GHz)	DC-2	2-4	4-12.4
INSERTION LOSS (MAX) dB	0.2	0.25	0.5
ISOLATION (MIN) dB	80	80	60
V.S.W.R. (MAX)	1.15:1	1.2:1	1.5:1

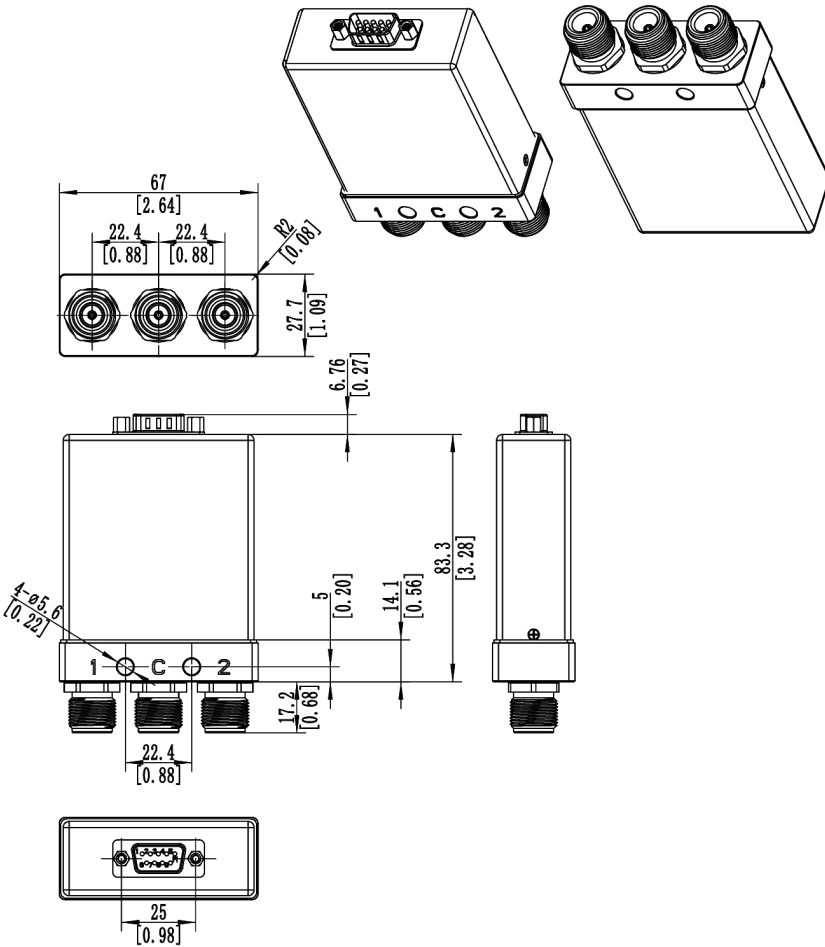
### Environmental And Physical Characteristics:

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 / 11ms, ½ sine
RF Connector type	N Female
Control connector	D-SUB 9PIN Male
Weight	260g Max
Housing Color	Light Blue (Optional)

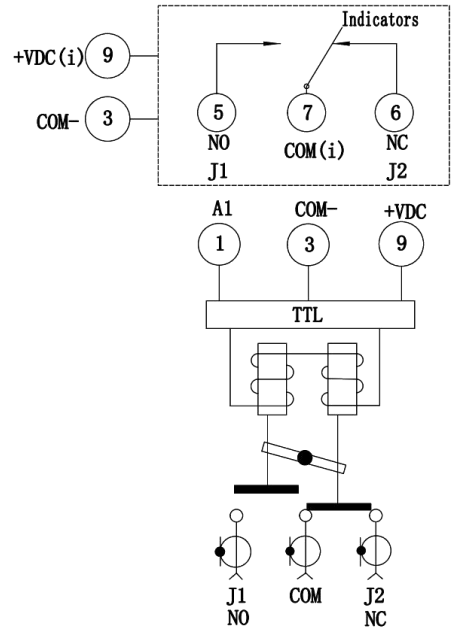
**SPDT Coaxial Switches**  
 N, Failsafe, TTL, DC to 12.4 GHz,  
 DSUB-9, Electronics Type Indicator



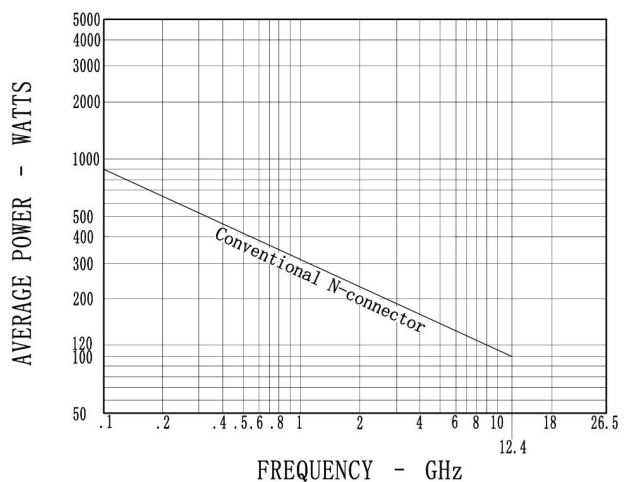
**Outline Drawing:** Unit: mm



**Schematic:**



**Average power:**



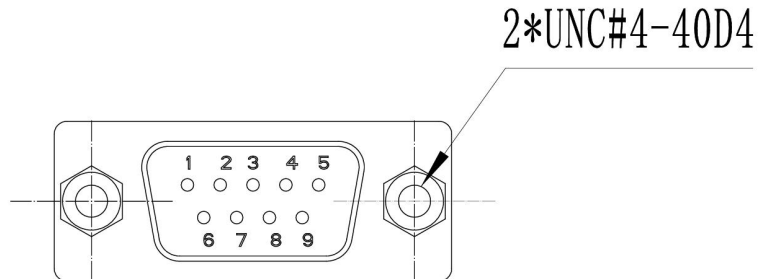
This graph is based on the following conditions:

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

SPDT Coaxial Switches  
 N, Failsafe, TTL, DC to 12.4 GHz,  
 DSUB-9, Electronics Type Indicator



**Pin Definition:**



DB9 Male

9 PIN D-SUB		RF Connect Used
Pin NO.	Function	SPDT
1	A1 (TTL IN)	NO:J1-COM
	0	NC:J2-COM
2	UNUSED	
3	COM-	
4	UNUSED	
5	1(IND.)	NO:J1-COM
6	2(IND.)	NC:J2-COM
7	COMi(IND.)(V+)	
8	UNUSED	
9	+VDC/VDC(i)	

**Part Number:**

Part Number	Rated Voltage	Option
SPDT		
LF-SPDT-N-F-12VDC-12.4G	12VDC	-S
LF-SPDT-N-F-24VDC-12.4G	24VDC	S model meets IP65
LF-SPDT-N-F-28VDC-12.4G	28VDC	