

YSSW-ED-18-SF-HV-SP-12-F

Electromechanical RF Switch, SPDT, DC-18 GHz, SMA Female, Failsafe

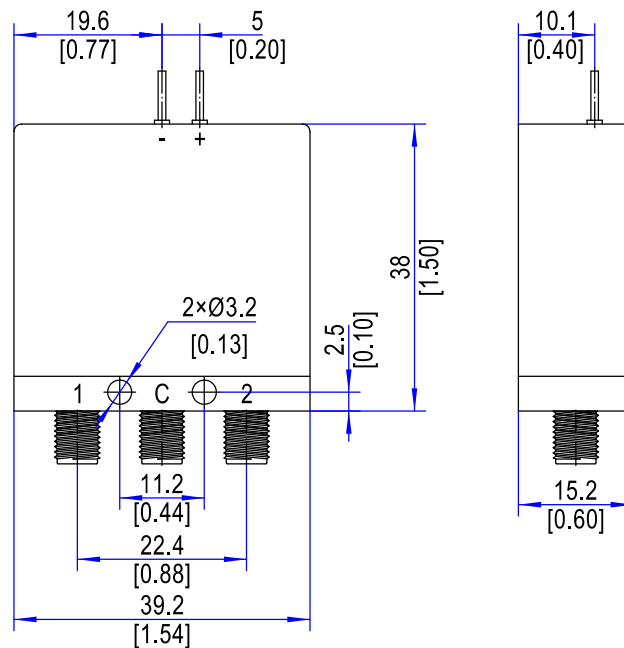
Key Features

- DC-18 GHz broadband
- Low VSWR & insertion loss
- High isolation & repeatability
- ≥2 million switching cycles
- 12 V voltage drive

Applications

- Radar systems
- Satellite communications
- 5G / 6G communications
- ATE & semiconductor testing
- RF test & measurement

Electrical Specifications			
Parameter	Specification		
Frequency Range	DC-6 GHz	6-12 GHz	12-18 GHz
Insertion Loss, Max.	≤0.30 dB	≤0.40 dB	≤0.50 dB
VSWR, Max.	≤1.30	≤1.40	≤1.50
Isolation, Min.	≥70 dB	≥70 dB	≥60 dB
Average Power, Max.	≤85 W	≤70 W	≤55 W
Impedance	50 Ω		
Control Method	Voltage Drive		
Operating Mode	Failsafe		
Rated Voltage	12 VDC		
Drive Current	≤190 mA		
Control Interface	Solder Pins		
Environmental Specifications			
Parameter	Specification		
Operating Temperature	-45°C to +65°C(Standard)		
Storage Temperature	−55°C to +85°C		
Relative Humidity	5-85%		
Protection Rating	IP63		
Shock, Non-operating	50 G, 1/2 Sine, 11 ms		
Vibration, Operating	10 G RMS, 20-2000 Hz		
Mechanical Specifications			
Parameter	Specification		
RF Connector	SMA Female		
Switching Life	≥2 million cycles		
Switching Time	≤15 ms		
Weight	≤70 g		
Dimensions ¹	39.2×38×15.2 mm [1.54×1.50×0.60 in]		
Pin Definition			
Pin	Node Definition	RF Path	
Pin -	Ground	-	
Pin +	+12 V	C−1 Conducting	
Power Off	No power applied	C−2 Conducting	

Outline Drawing (Units: mm [in], Tolerance: ± 0.2 mm)


Note 1: Excluding Connector size

Special Notes:a

1. This product is an electrostatic-sensitive device (ESD-sensitive). Appropriate ESD protection measures shall be taken during storage, transportation, and use.
2. This product is not hermetically sealed. Measures shall be taken to protect it from moisture and rain. Store the product in a dry and dust-free environment.
3. Before use, verify the power supply and control pin requirements to avoid incorrect connections or exceeding the specified limits..
- 4.The RF ports use precision coaxial connectors. Use appropriate mating connectors and a torque wrench to ensure proper connection.
- 5.Product specifications are subject to change without prior notice.