



E Band DPDT Motorized Switch with TTL Driver, E Plane

Description:

Model SWJ-12-TS is an E band motorized double pole, double throw (DPDT) transfer switch with a TTL driver that covers the frequency range of 60 to 90 GHz. The switch has four ports and the switching is E plane. The switch is a bi-directional device which allows each port to be switched on and off between the adjacent ports. The insertion loss of the switch is 0.4 dB typical and the minimum isolation is 50 dB. The switch has WR-12 waveguides with UG-387/U flanges. The bias and control signal connector is MS3112E-10-6P type.



Features:

- Low Insertion Loss
- High Isolation
- TTL Control

Applications:

- 5G Systems
- Test Set
- Communication Systems
- Radar Systems

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	60 GHz		90 GHz
Insertion Loss		0.4 dB	
Isolation	50 dB		
Bias Voltage		$\pm 28 V_{DC}$	
Bias Current		250 mA	
Return Loss	20 dB		
Control Signal		TTL	
Switching Speed		125 mS	
Cycle Time	250,000	1,000,000	
Power Handling		100 W (CW)	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

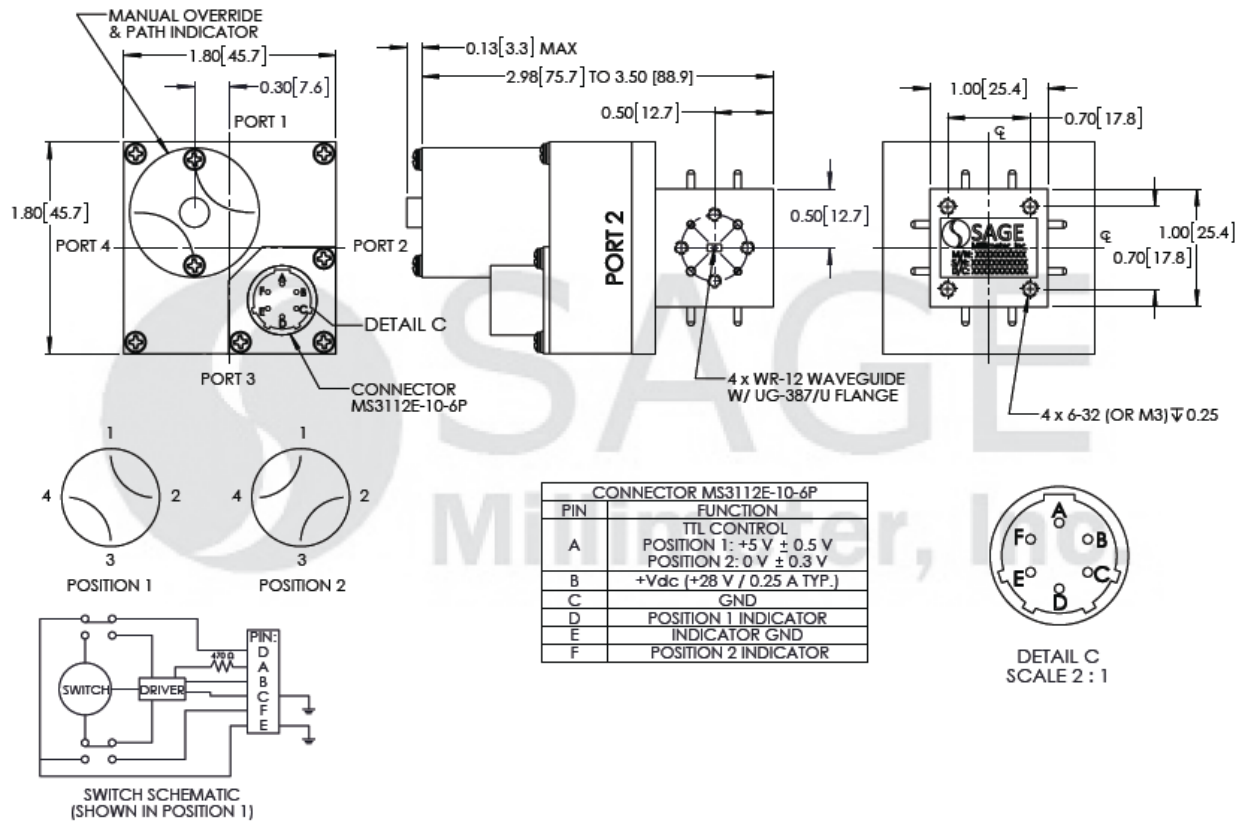
Item	Specification
RF Ports	WR-12 Waveguide with UG-387/U Flange
Bias Port and TTL Control Ports	MS3112E-10-6P
Waveguide Material	Aluminum
Waveguide Finish	Clear Chem Film
Switch Body Finish	Black Paint
Weight	7.7 Oz
Outline	WJ-TE-S1



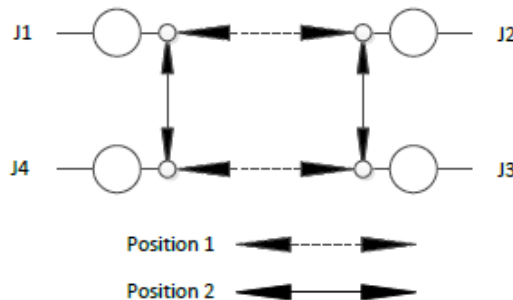


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Mechanical Outline: (Unless otherwise specified, all dimensions are in inches [millimeters])



Electrical Schematic:



Note:

- Other mechanical configurations are available under different model numbers.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

- The switch is a static sensitive device. Always follow ESD rules when working with the switch.
- Any foreign objects in the waveguide will cause performance degradation and possible device damage.

