SWJ-15-M1

Manual Waveguide Switch, V-Band, E-Plane

SWJ-15-M1 is a V-band manual waveguide switch that covers the frequency range of 50 to 75 GHz. The switch is a E-plane type, bi-directional, multi-path device with a 3-channel rotor which allows for switching between four distinct positions. The typical insertion loss and isolation are 0.4 dB and 60 dB, respectively. The RF ports are WR-15 waveguides with UG-385/U anti-cocking flanges.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	60 GHz		90 GHz
Insertion Loss		0.4 dB	
Isolation		60 dB	
Return Loss		23 dB	
Specification Temperature		+25°C	
Operating Temperature	-25°C		+65°C

Mechanical Specifications:

Item	Specification
RF Ports	WR-15 Waveguide with UG-385/U Anti-Cocking Flange
Port Orientation	E-Plane
Body Material	Brass
Body Finish	Gold Plated
Weight	2.0 lbs.
Outline	WJ-MV-A

ECCN

EAR99

FEATURES

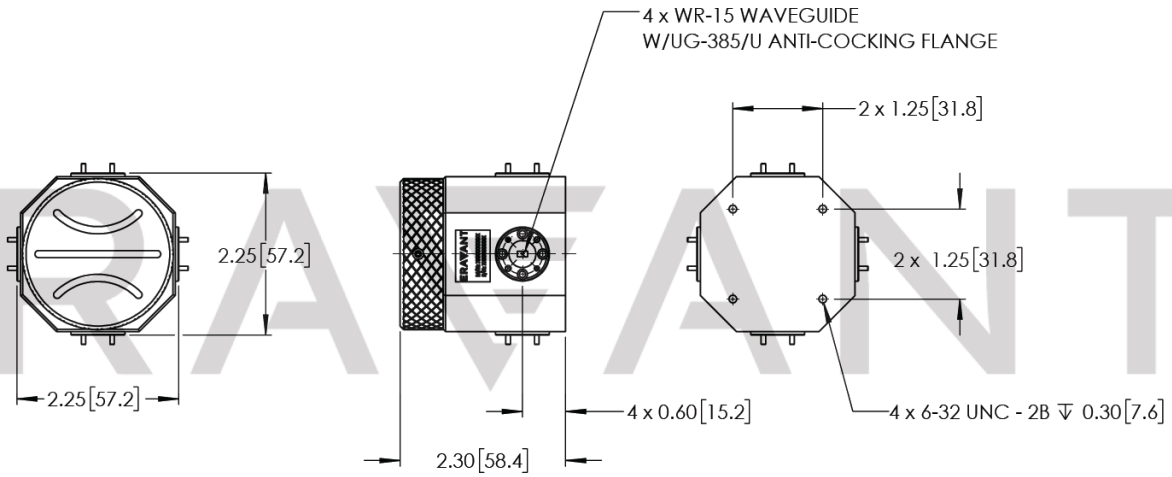
- Low Insertion Loss
- High Isolation
- Clockwise or Anti-clockwise Rotation
- 3-Channel Rotor

APPLICATIONS

- Test Lab
- Communication Systems
- Radar Systems

SUPPLEMENTAL DETAILS

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



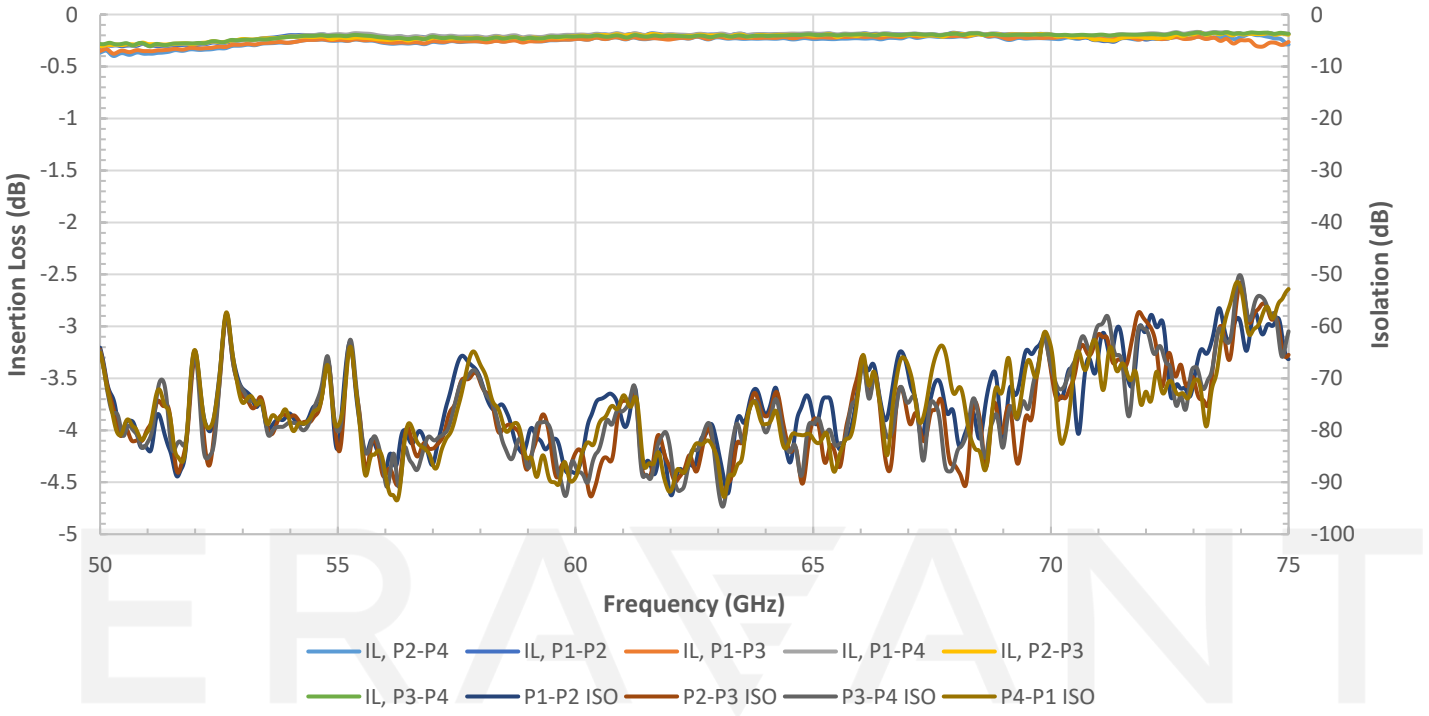
NOTE:

- On condition that test data is provided it is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- On condition that simulated test data is provided, actual measured data may slightly vary.
- Eravant reserves the right to change the information presented without notice.

CAUTION:

- Any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.
- For 1 mm connectors proper torque should be applied: 4.0 ± 0.15 inch-pounds (0.45 ± 0.02 Nm). Torque wrench model SCH-06004-S1 is highly recommended.
- For 1.35 mm, 1.85 mm, 2.4 mm, 2.92 mm, and SMA connectors proper torque should be applied: 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm). Torque wrench model SCH-08008-S1 is highly recommended

Typical Measured Insertion Loss and Isolation vs Frequency



Typical Measured Return Loss vs Frequency