

## Manual Waveguide Switch, F-Band, E-Plane

**SWJ-08-M1** is a F-band manual waveguide switch that covers the frequency range of 90 to 140 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 1.6 dB and 50 dB, respectively. The RF ports are WR-08 waveguides with UG-387/U-M anti-cocking flanges.



# **Electrical Specifications:**

| Parameter                 | Minimum | Typical | Maximum |
|---------------------------|---------|---------|---------|
| Frequency Range           | 90 GHz  |         | 140 GHz |
| Insertion Loss            |         | 1.6 dB  |         |
| Isolation                 |         | 50 dB   |         |
| Return Loss               |         | 20 dB   |         |
| Specification Temperature |         | +25°C   |         |
| Operating Temperature     | -25°C   |         | +65°C   |

## **Mechanical Specifications:**

| Item             | Specification                                       |  |  |
|------------------|---|--|--|
| RF Ports         | WR-08 Waveguide with UG-387/U-M Anti-Cocking Flange |  |  |
| Port Orientation | E-Plane   |  |  |
| Body Material    | Brass   |  |  |
| Body Finish      | Gold Plated   |  |  |
| Weight           | 2.0 lbs.  |  |  |
| Outline          | WJ-MF-A   |  |  |

#### **ECCN**

EAR99

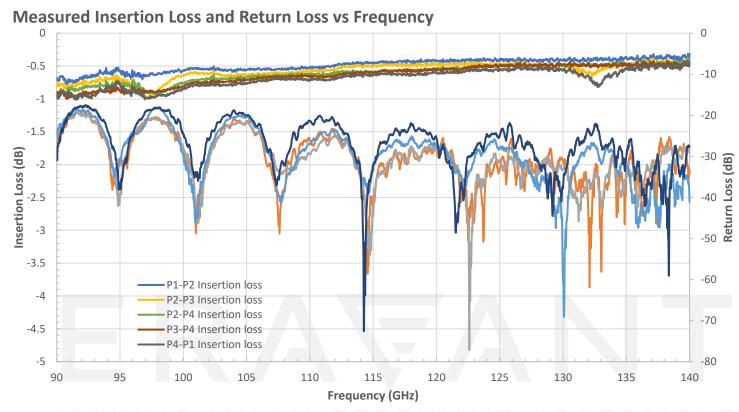
#### **FEATURES**

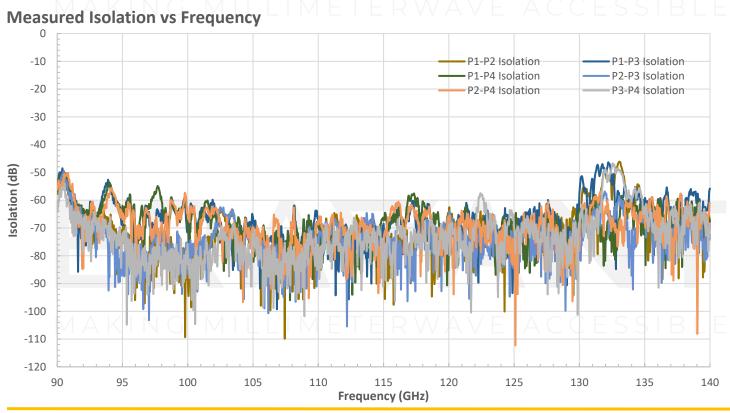
- · Low Insertion Loss
- High Isolation
- Clockwise or Anti-clockwise Rotation
- 3-Channel Rotor

#### **APPLICATIONS**

- Test Lab
- Communication Systems
- Radar Systems

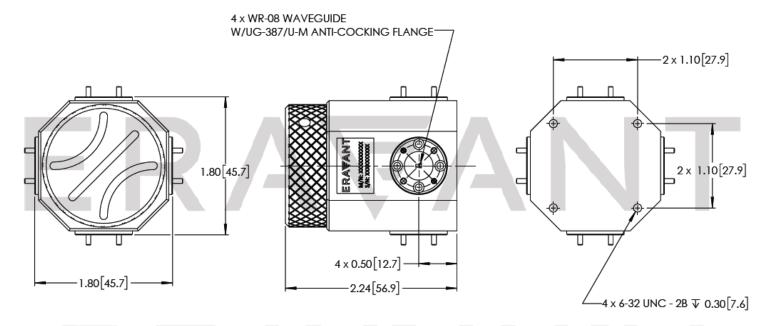
### **SUPPLEMENTAL DETAILS**







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.
- 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.

# ERAFANT

MAKING MILLIMETERWAVE ACCESSIBLE