

Manual Waveguide Switch, Ka-Band, H-Plane

SWJ-28-M1-H is a Ka-band manual switch that covers the frequency range of 22 to 42 GHz. It is an H-plane switch that has four ports which allows four switching positions, two through and two adjacent paths. The switch is a bi-directional, multi-path device which allows clockwise and anti-clockwise switching between two through ports and two adjacent ports. The typical insertion loss and isolation are 0.2 dB and 45 dB, respectively. The RF ports are WR-28 waveguides with UG-599/U flanges. The E-plane version of the switch is offered under model [SWJ-28-M1-2](#).



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	22 GHz		42 GHz
Insertion Loss		0.2 dB	
Isolation		45 dB	
Return Loss		20 dB	
Power Handling		100 mW (CW)	
Cycle Time	250,000	500,000	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
RF Ports	WR-28 Waveguide with UG-599/U Flange
Material	Brass
Finish	Gold Plated
Weight	1.8 lbs.
Outline	WJ-MA-H

ECCN

EAR99

FEATURES

- Low Insertion Loss
- High Isolation
- Extended Standard Bandwidth to 22 to 42 GHz
- Durable and repeatable
- Either Clockwise or Anti-clockwise Rotation

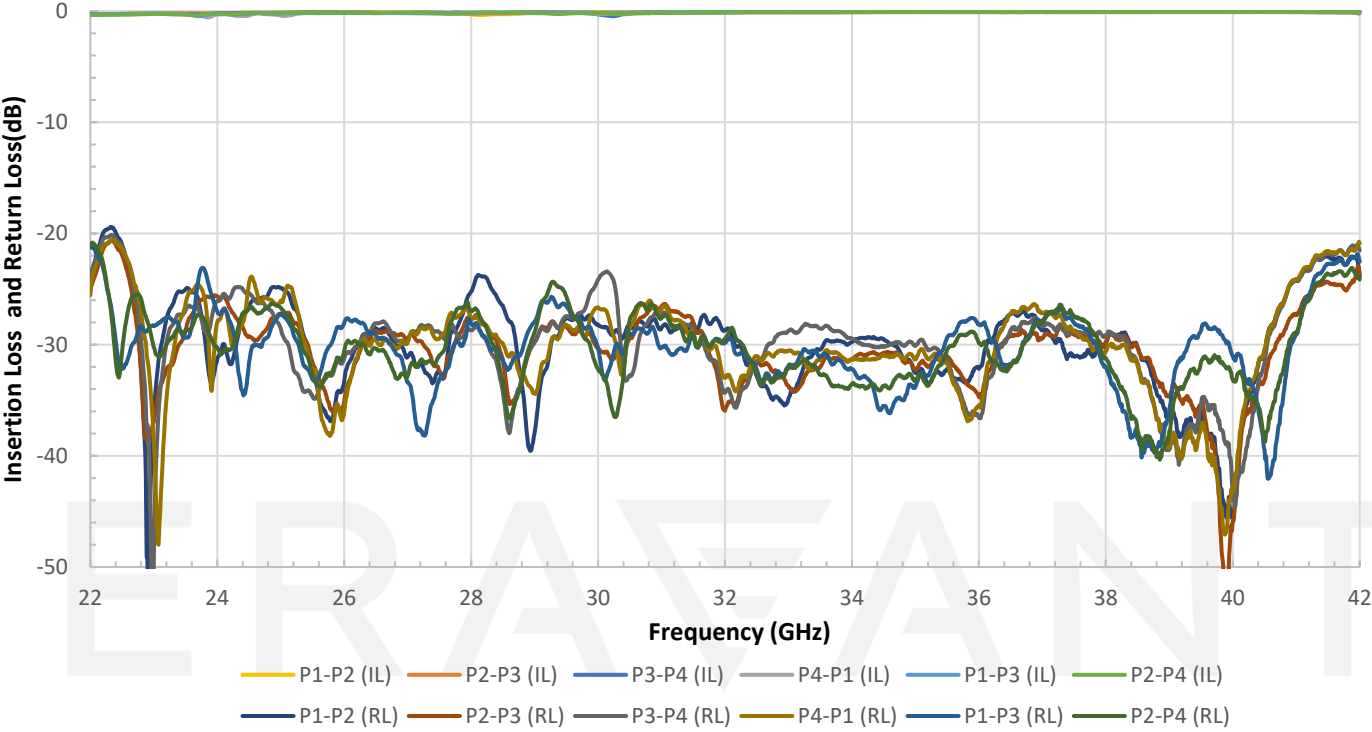
APPLICATIONS

- Test Lab
- Instrumentations
- System Integration

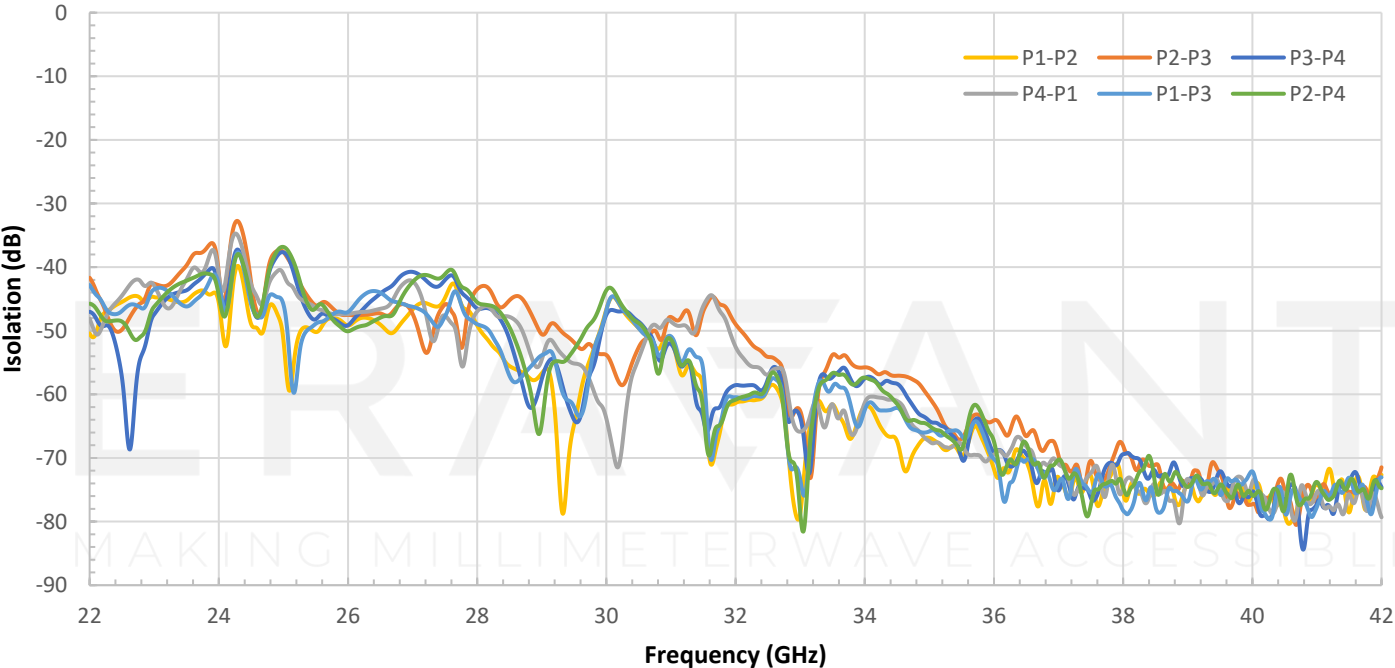
SUPPLEMENTAL DETAILS



Measured Insertion Loss and Return Loss vs. Frequency

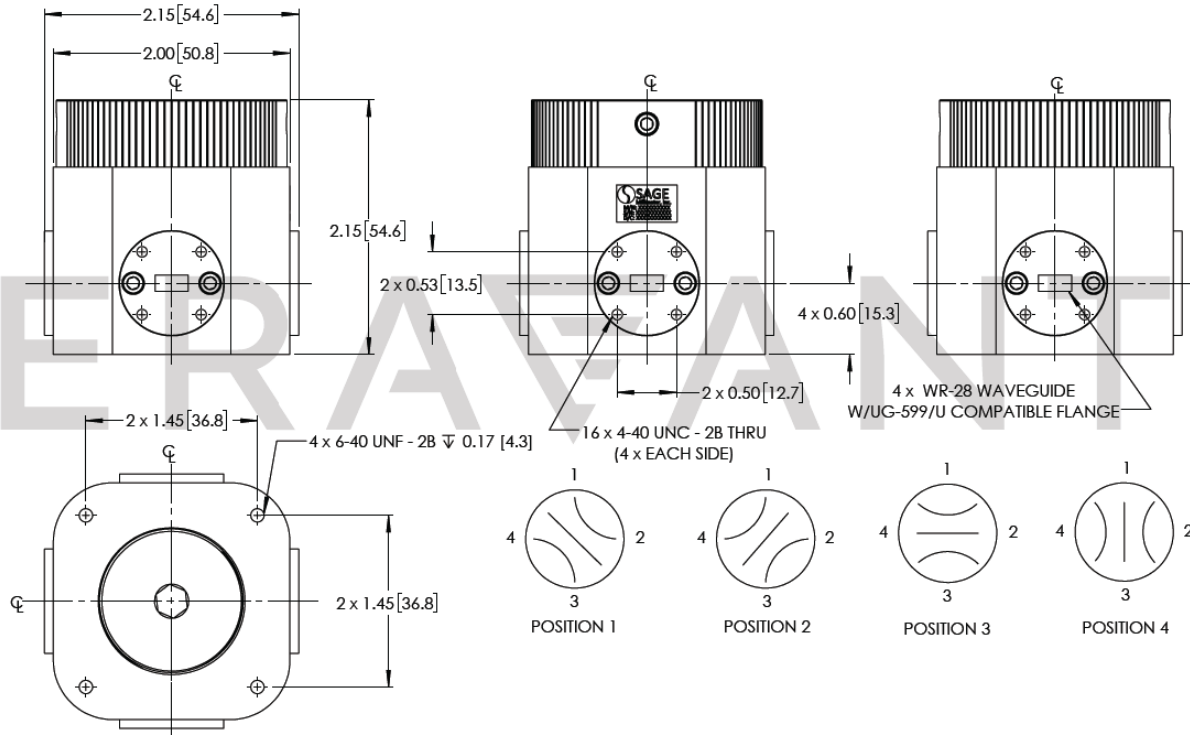


Measured Isolation vs. Frequency



SWJ-28-M1-H

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:

- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.