SWJ-28-M1-2

Rev. 1.1

Manual Waveguide Switch, Ka-Band, E-Plane

Description:

Model SWJ-28-M1-2 is a Ka-band manual switch that covers the frequency range of 22 to 44 GHz. It is an E-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 H-plane version of the switch is offered under model **SWJ-28-M1-H**.

Features:

- Low Insertion Loss
- High Isolation
- Extended Standard Bandwidth to 22 to 44 GHz
- Durable and repeatable
- Either Clockwise or Anti-clockwise Rotation

Applications:

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

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency	22 GHz		44 GHz
Insertion Loss		0.2 dB	
Isolation		45 dB	
Return Loss		20 dB	
Power Handling		100 W (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 Compatible Flange
Material	Brass
Finish	Gold Plated
Weight	1.8 lbs.
Outline	WJ-MA

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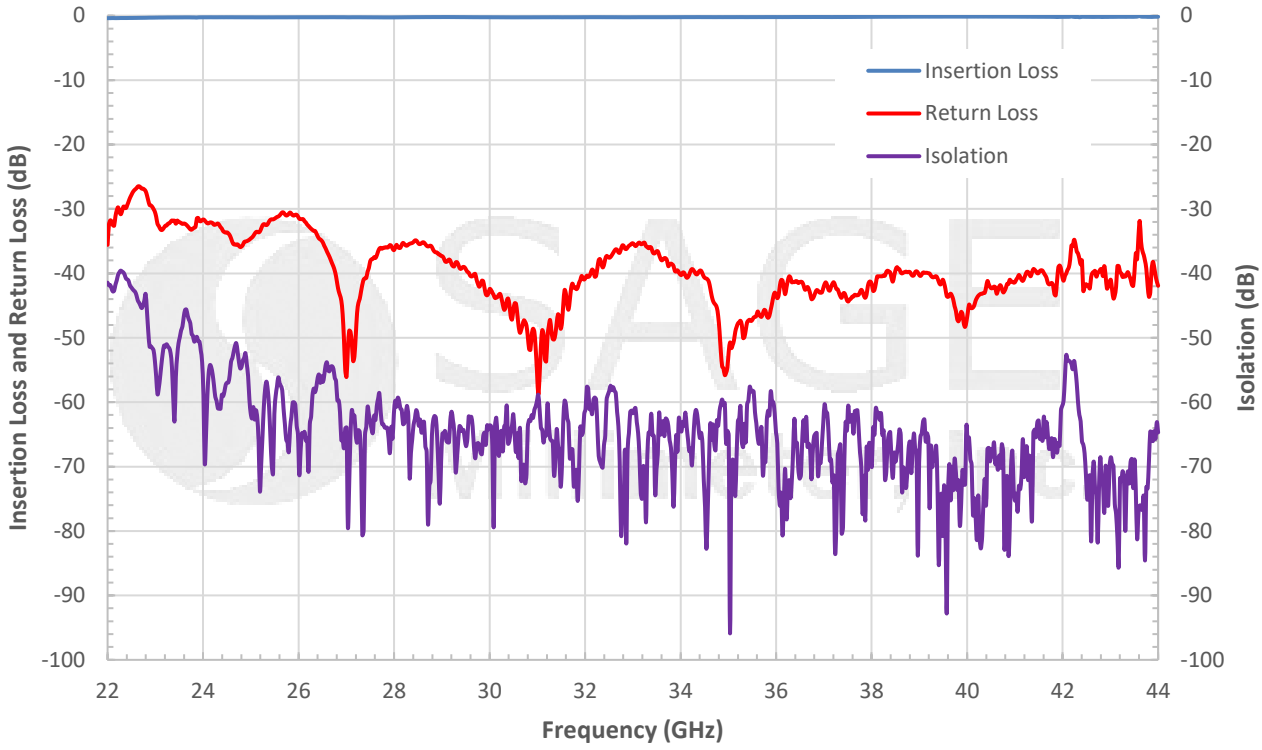
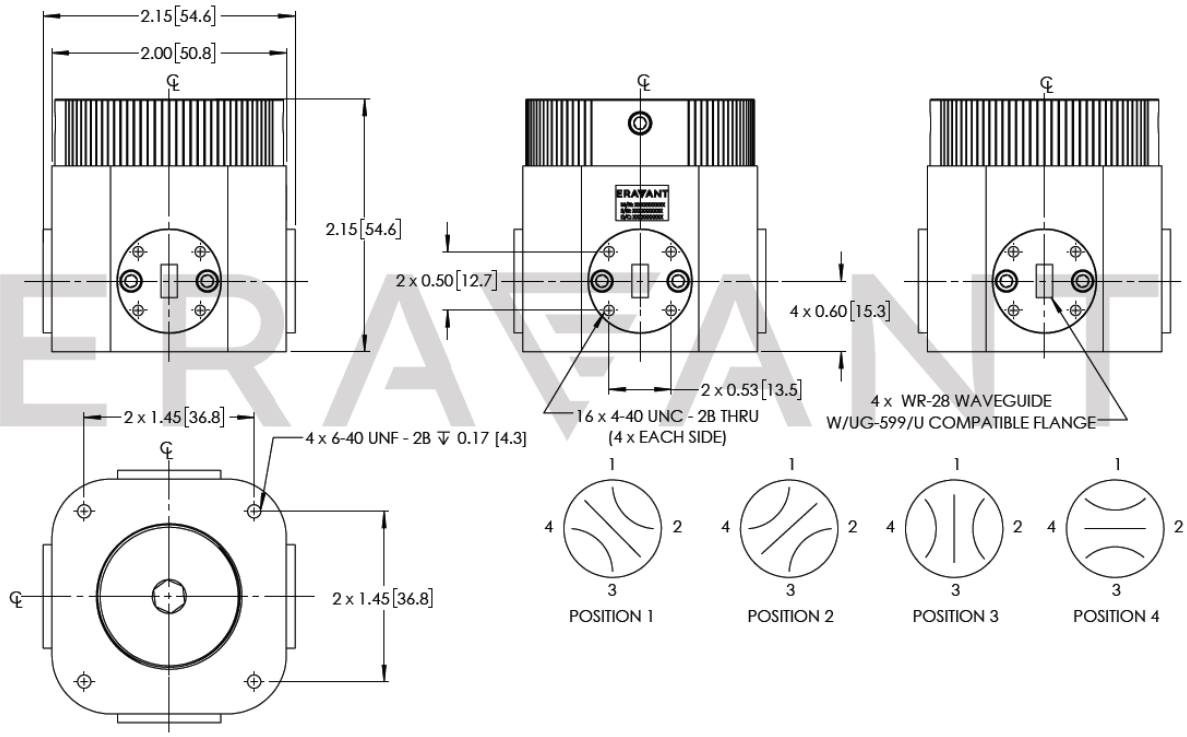
Typical Performance vs Frequency



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



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Note:

- All data presented is collected from a sample lot. Actual data may vary unit to unit, slightly.
- All testing was performed under +25 °C case temperature.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

- Any foreign objects in the waveguide will cause performance degradation and possible device damage.

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