SWF-35302213-28-B1-C

Compact Waveguide Bandpass Filter, Ka Band, 35.5 GHz, 2nd and 3rd Harmonic Rejection

SWF-35302213-28-B1-C is a Ka band iris resonance based compact bandpass filter with a passband center frequency at 35.5 GHz and 2nd and 3rd harmonic rejection frequencies at 71 GHz and 106.5 GHz. It is designed for any oscillator with a WR-28 waveguide output to pass the fundamental frequency at 35.5 GHz and reject the second harmonic at 71 GHz and third harmonic at 106.5 GHz. This filter is specially designed to be used with Eravant's 35.5 GHz Ka band volume production oscillator model SOL-35312-28-G1.

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	35.4 GHz	35.5 GHz	35.6 GHz
Passband Insertion Loss		0.5 dB	
Passband Return Loss		10 dB	
2nd Harmonic Rejection Frequency		71 GHz	
2nd Harmonic Rejection		13 dB	
3rd Harmonic Rejection Frequency		106.5 GHz	
3rd Harmonic Rejection		15 dB	
Specification Temperature		+25 °C	
Operating Temperature	-40 °C		+85 °C

Mechanical Specifications:

Item	Specification
Waveguide Port	WR-28
Flange	UG-599/U
Material	Aluminum
Finish	Chem Film
Weight	0.1 Oz
Outline	WF-BA-C-2

ECCN

EAR99

FEATURES

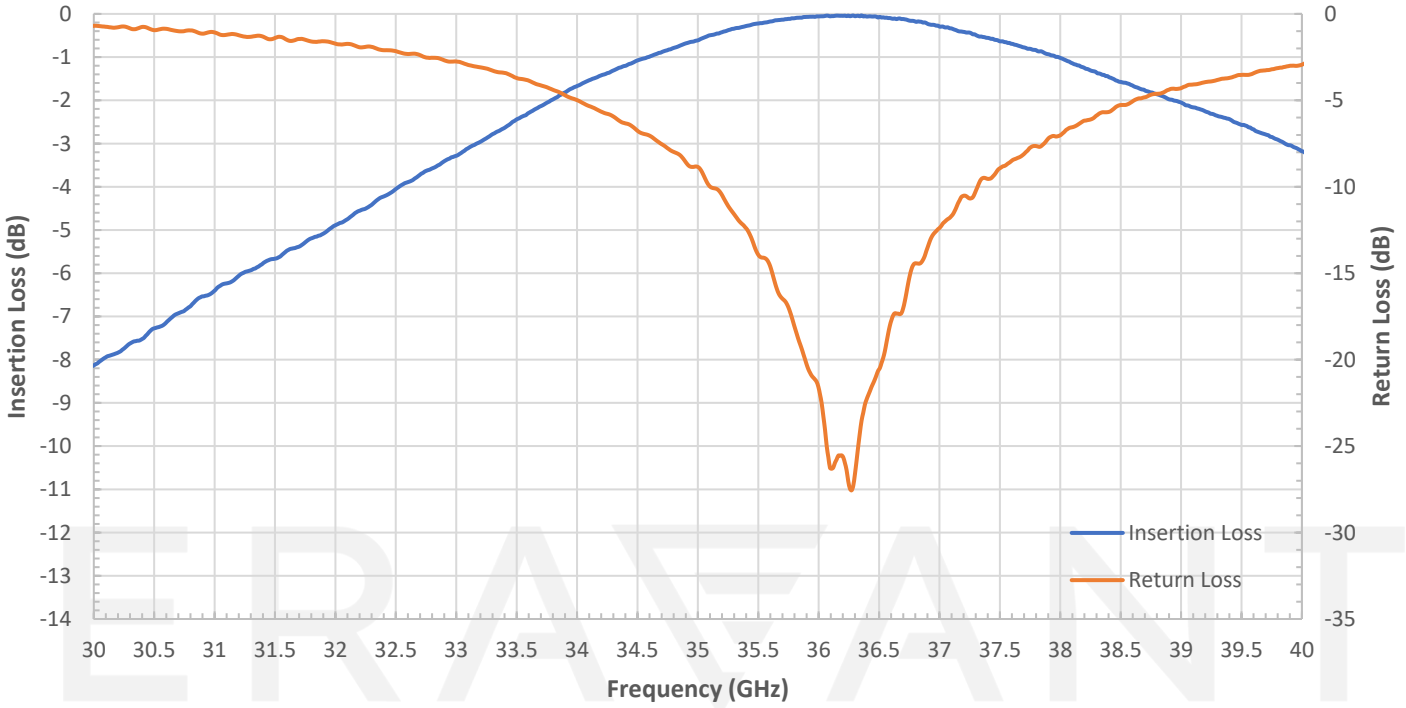
- Low Cost
- Low Insertion Loss
- Compact Size
- 2nd and 3rd Harmonic Rejection

APPLICATIONS

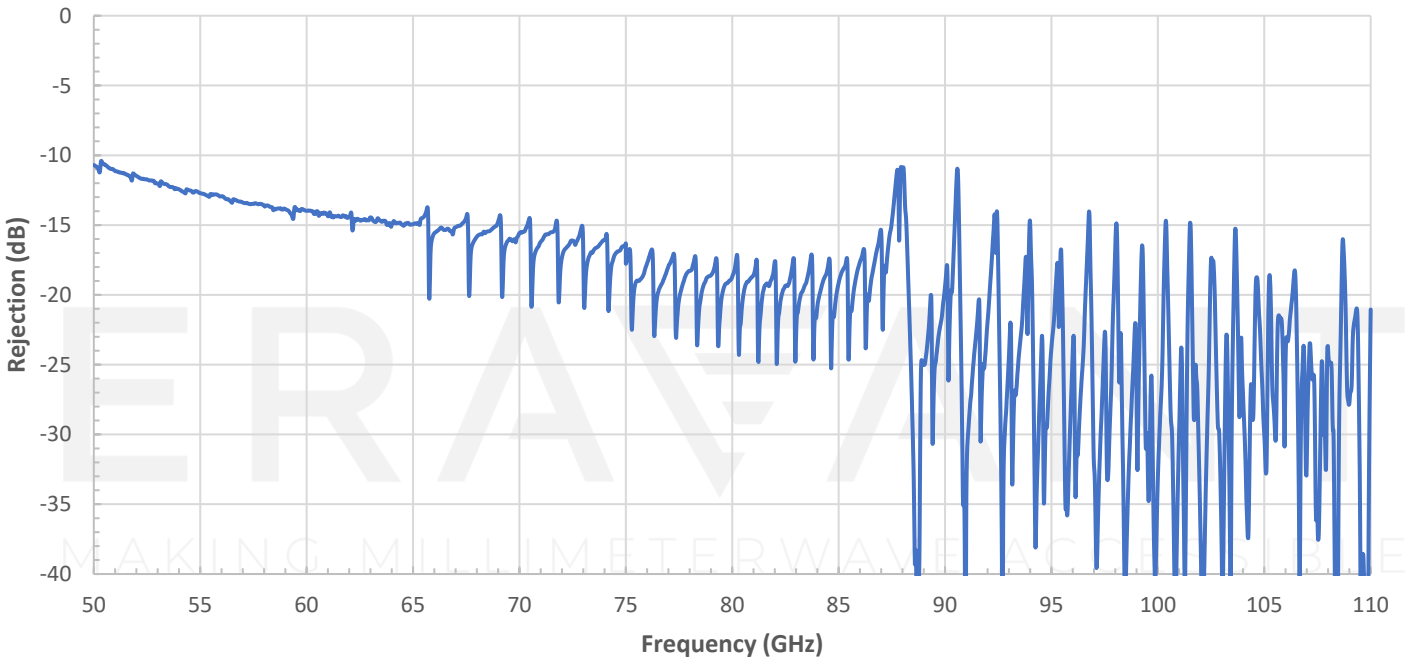
- Ka Band Radar and Sensor Systems
- Sub-assemblies

SUPPLEMENTAL DETAILS

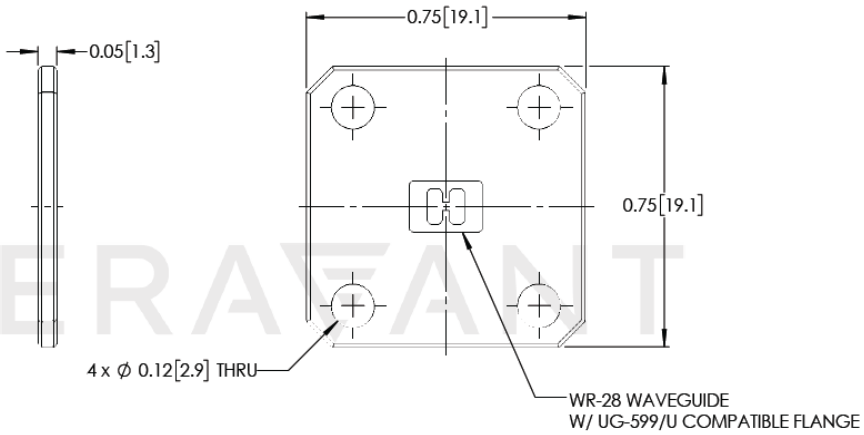
Typical Measured Performance vs Frequency @ 35.5 GHz



Typical Measured Rejection vs Frequency (50 to 110 GHz)



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



NOTE:

- Test data provided 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.