

Waveguide Lowpass Filter, E Band, 50 to 90 GHz

SWF-90395340-12-L1 is an E band waveguide lowpass filter with a passband frequency from 50 to 90 GHz and a rejection frequency from 95 to 140 GHz. Due to the corrugated design of the WR-12 waveguide, the filter also has a low side rejection frequency from DC to 45 GHz. As such, this filter can also be accepted as a bandpass filter. The filter provides a nominal insertion loss of 1.8 dB across its passband and a typical rejection of 40 dB. Since the high end cutoff frequency can be changed by modifying the design, custom designs can be offered under different model numbers.



Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency Range	50 GHz		90 GHz
Passband Insertion Loss		1.8 dB	
Rejection Frequency, Low Side	DC		45 GHz
Rejection Frequency, High Side	95 GHz		140 GHz
Rejection		40 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification		
Waveguide	WR-12 Waveguide with UG-387/U Anti-Cocking Flange		
Material	Brass		
Finish	Gold Plated		
Weight	4 Oz		
Outline	WF-LE-A-1.6-2		

ECCN

EAR99

FEATURES

- Full Band Operation
- Low Insertion Loss
- · High Rejection

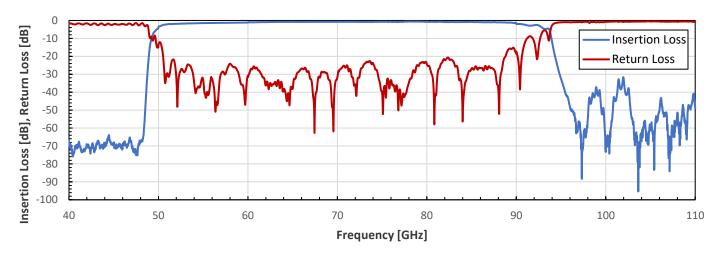
APPLICATIONS

- Test Labs
- Instrumentations
- Sub-assemblies

SUPPLEMENTAL DETAILS

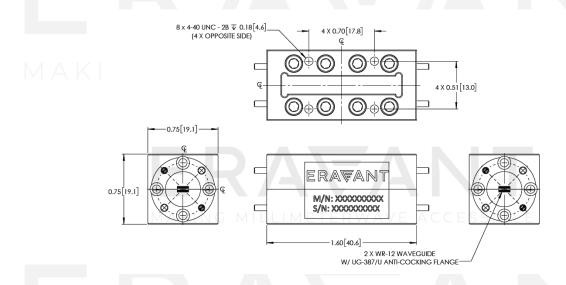


Typical Rejection vs. Frequency



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:

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