Waveguide Bandpass Filter, E-Band, 81 to 86 GHz

SWF-84305350-12-B1 is an E-Band waveguide bandpass filter with a passband frequency of 81 to 86 GHz and rejection frequencies from DC to 78 GHz and 90 to 105 GHz. The nominal insertion loss of the bandpass filter is 2.0 dB and the typical rejection is 50 dB. Since both low end and high end cut off frequencies can be selected by modifying the design, custom designs are available under different model numbers.



Electrical Specifications

Parameter	Minimum	Typical	Maximum
Passband Frequency	81 GHz		86 GHz
Passband Insertion Loss		2.0 dB	2.5 dB
Passband Ripple		±0.3 dB	
Rejection Frequency: Low Side	DC		78 GHz
Rejection Frequency, High Side	90 GHz		105 GHz
Rejection	40 dB	50 dB	
Passband VSWR		1.5:1	
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	Aluminum
Finish	Gold Plated
Weight	0.4 oz ERATION MILLIMETERWA
Size	1.20" (L) x 0.75" (Ø)
Outline	WF-BE-A

ECCN

EAR99

FEATURES

- Low Cost
- · Low Insertion Loss
- · High Rejection

APPLICATIONS

- E-Band Communication Systems
- · Automotive Radar Systems
- Sub-assemblies

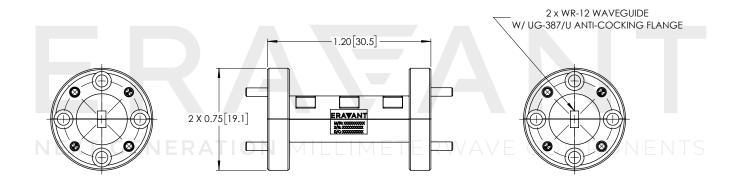
SUPPLEMENTAL DETAILS



SWF-84305350-12-B1

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

- Exceeding absolute maximum ratings will damage the device.
- Any foreign objects in the waveguide will cause performance degradation or damage the device.

