SWF-53312350-15-B1

Waveguide Bandpass Filter, V Band, 47 to 59 GHz

SWF-53312350-15-B1 is a V band waveguide bandpass filter with a passband frequency of 47 to 59 GHz and rejection frequencies from DC to 44 GHz and 63 to 78 GHz. The nominal insertion loss of the bandpass filter is 2 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:

ParameterMinimumTypicalMaximumPassband Frequency Range47 GHz59 GHzPassband Insertion Loss2 dB2 dBPassband Ripple±0.5 dB±0.5 dBRejection Frequency, Low SideDC44 GHzRejection Frequency, High Side63 GHz78 GHzRejection Frequency High Side50 dB14 dBPassband Return Loss14 dB+25°COperating Temperature-40°C+85°C	Electrical opecificatione.			
Passband Insertion Loss2 dBPassband Ripple±0.5 dBRejection Frequency, Low SideDCRejection Frequency, High Side63 GHzRejection Frequency, High Side50 dBPassband Return Loss14 dBSpecification Temperature+25°C	Parameter	Minimum	Typical	Maximum
Passband Ripple±0.5 dBRejection Frequency, Low SideDC44 GHzRejection Frequency, High Side63 GHz78 GHzRejection50 dB14 dBPassband Return Loss14 dBSpecification Temperature+25°C	Passband Frequency Range	47 GHz		59 GHz
Rejection Frequency, Low SideDC44 GHzRejection Frequency, High Side63 GHz78 GHzRejection50 dBPassband Return Loss14 dBSpecification Temperature+25°C	Passband Insertion Loss		2 dB	
Rejection Frequency, High Side63 GHz78 GHzRejection50 dB50 dBPassband Return Loss14 dBSpecification Temperature+25°C	Passband Ripple		±0.5 dB	
Rejection50 dBPassband Return Loss14 dBSpecification Temperature+25°C	Rejection Frequency, Low Side	DC		44 GHz
Passband Return Loss 14 dB Specification Temperature +25°C	Rejection Frequency, High Side	63 GHz		78 GHz
Specification Temperature +25°C	Rejection		50 dB	
	Passband Return Loss		14 dB	
Operating Temperature -40°C +85°C	Specification Temperature		+25°C	
	Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification	SUPPLE
Waveguide	WR-15 Waveguide with UG-385/U Anti-Cocking Flange	
Material	Brass	
Finish	Gold Plated	
Weight	4.5 Oz	
Outline	WF-BV-L1-A	

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FEATURES

- Low Cost
- Low Insertion Loss
- High Rejection

APPLICATIONS

- IEEE 802.11ad WiGig Systems
- Test Labs
- Instrumentations
- Sub-assemblies

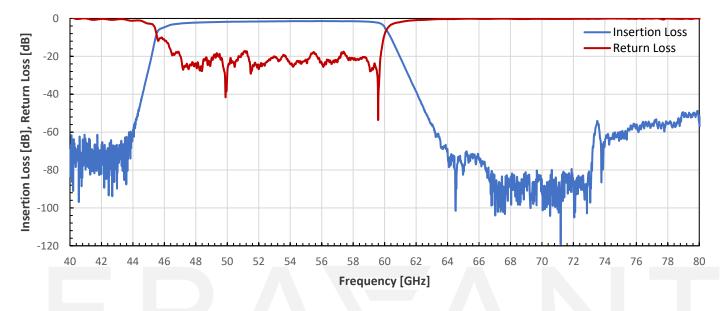
SUPPLEMENTAL DETAILS





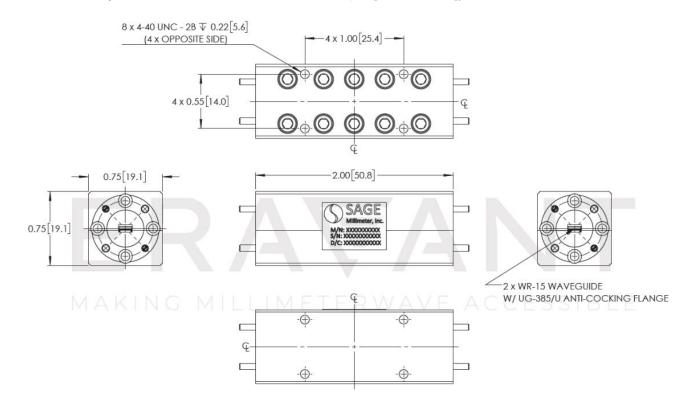
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Typical Rejection vs. Frequency



Mechanical Outline:

Unless otherwise specified, all dimensions are in inches [millimeters])



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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.

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