SWF-45310360-2F2F-B1

Rev 1.0

Waveguide Bandpass Filter, Q Band, 40 to 50 GHz

Description:

Model SWF-45310360-2F2F-B1 is a Q band waveguide bandpass filter with a passband frequency of 40 to 50 GHz and rejection frequencies from DC to 34 GHz and 54 to 64 GHz. The nominal insertion loss of the bandpass filter is 2.0 dB and the typical rejection is 60 dB. The filter is equipped with 2.4 mm (F) connectors for RF in/out ports. 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.

Features:

- Low Cost
- Low Insertion Loss
- High Rejection

Applications:

- Communication Systems
- Radar Systems
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	40 GHz		50 GHz
Passband Insertion Loss		2.0 dB	
Passband Ripple		± 0.25 dB	
Rejection Frequency, Low Side	DC		34 GHz
Rejection Frequency, High Side	54 GHz		64 GHz
Rejection		60 dB	
Passband VSWR		1.5:1	
Specification Temperature		+25˚C	
Operating Temperature	-40˚C		+85˚C

Mechanical Specifications:

Item	Specification
Connectors	2.4 mm (F)
Size	3.0 ” (L) X 1.13” (W) X 1.13” (H)
Material	Brass and Aluminum
Finish	Gold Plated
Weight	7.7 Oz
Outline	WF-BQ-CE-L1

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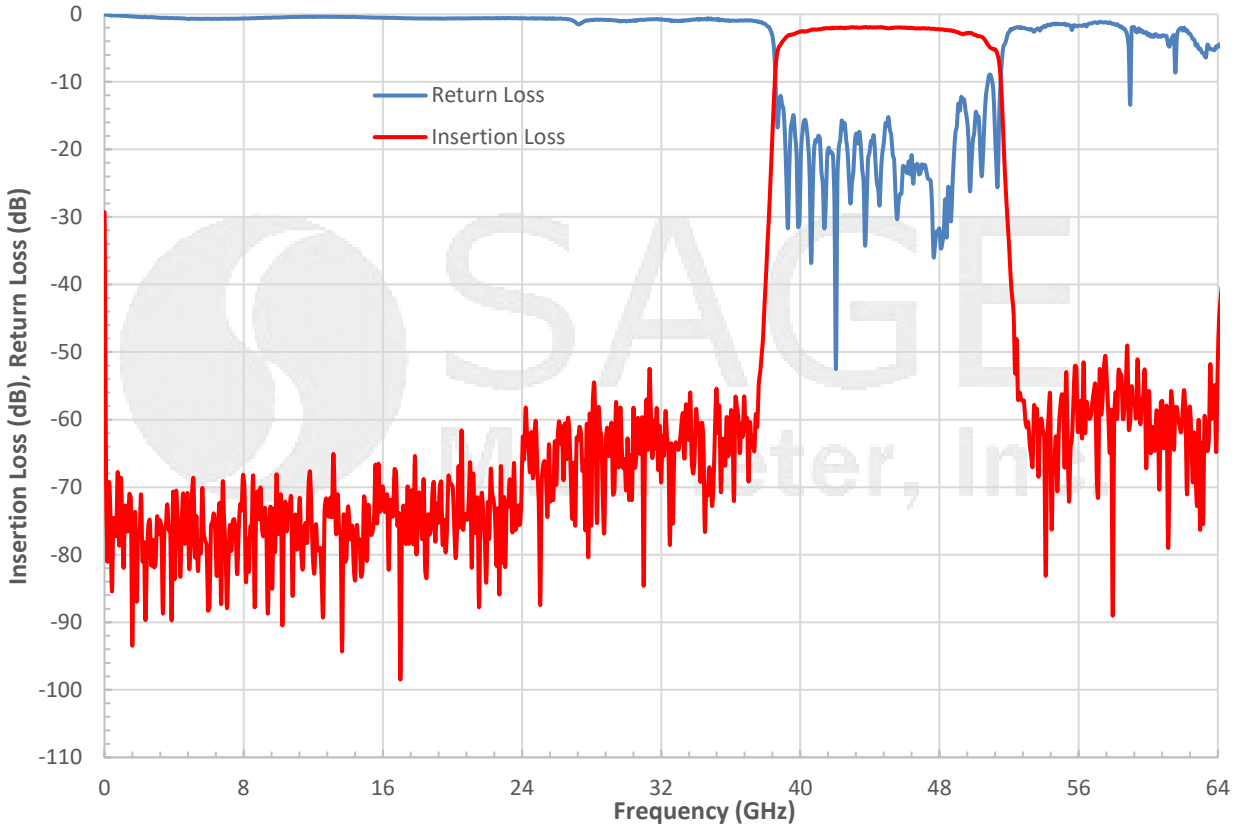
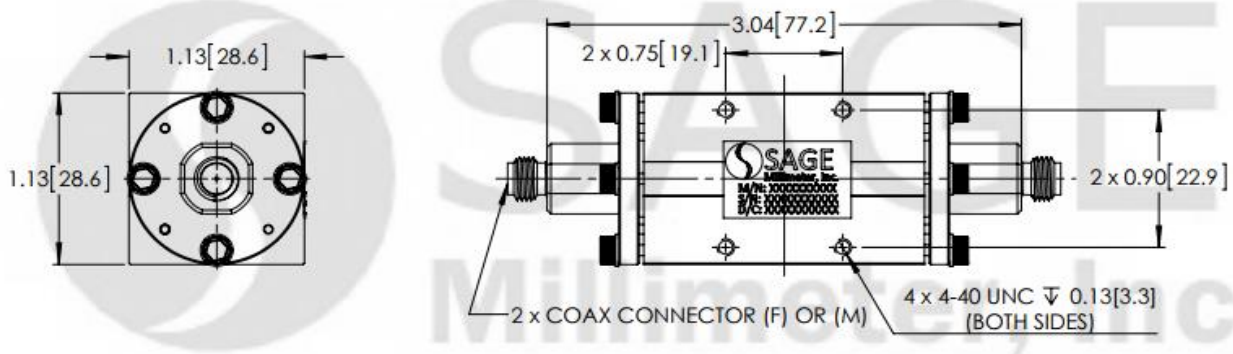
Typical Measured Insertion Loss and Return Loss Vs Frequency



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



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Note:

- All data presented is simulated. Actual data may vary.
- Eravant 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.
- Proper torque, 8.0 ± 0.15 inch-pounds (0.90 ± 0.02 Nm), should be applied. **Eravant torque wrench, model SCH-08008-U3, is highly recommended.**

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