

Waveguide Bandpass Filter, Ka Band, 34.65 to 34.85 GHz

Description:

Model SWF-35302240-28-B1 is a Ka band waveguide bandpass filter with a passband frequency of 34.65 to 34.85 GHz as well as rejection frequencies from 26 to 34.1 GHz and 35.4 to 40 GHz. The nominal insertion loss of the bandpass filter is 3.0 dB and the typical rejection is 40 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.



Features:

- Low Cost
- Low Insertion Loss
- High Rejection

Applications:

- Communication Systems
- Radar Systems
- Sub-assemblies

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Passband Frequency	34.65 GHz		34.85 GHz
Passband Insertion Loss		3.0 dB	
Passband Ripple		±0.4 dB	
Rejection Frequency, Low Side	26 GHz		34.1 GHz
Rejection Frequency, High Side	35.4 GHz		40 GHz
Rejection	Page A	40 dB	199
Passband Return Loss	. //	14 dB	
Group Delay		6 ns	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification	
Waveguide	WR-28 Waveguide with UG-599/U Flange	
Size	2.00" (L) X 0.75" (W) X 0.75" (H)	
Material	Aluminum	
Finish	Gold Plated	
Weight	3.0 Oz	
Outline	WF-BA	

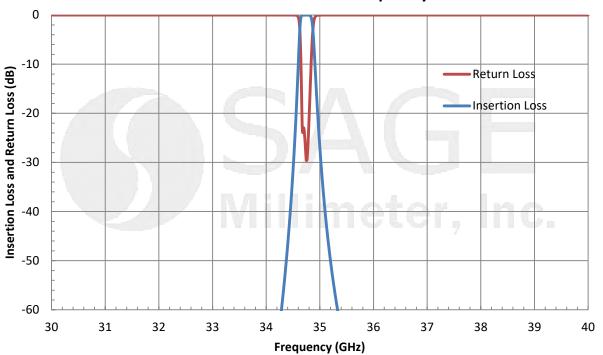


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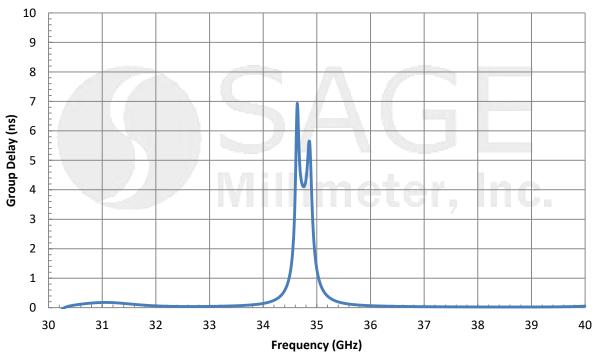


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Simulated Insertion Loss and Return Loss vs. Frequency



Simulated Group Delay



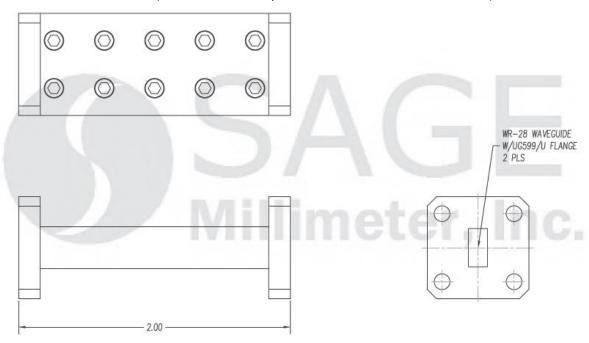


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Mechanical Outline: (Unless otherwise specified, all dimensions are in inches)



Note:

- All data presented is simulated. Actual data may vary, slightly.
- SAGE Millimeter, Inc. reserves the right to change the information presented without notice.

Caution:

• Any foreign objects in the waveguide will degrade performance and/or damage the device.



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