

Waveguide Bandpass Filter, K-Band, 17.7 to 20.2 GHz

SWF-19303390-42-B2 is a K-band waveguide bandpass filter with a passband frequency from 17.7 to 20.2 GHz and rejection frequencies from DC to 17.2 GHz and 20.7 to 31 GHz. The filter provides a nominal passband insertion loss of 0.8 dB and typical passband return loss of 18 dB. The filter has a minimum rejection value of 50 dB from DC to 17.2 GHz and 20.7 to 31.0 GHz, and a typical rejection value of 90 dB from 27.5 to 30 GHz.

**Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Passband Frequency	17.7 GHz		20.2 GHz
Passband Insertion Loss		0.8 dB	1.0 dB
Passband Return Loss		18 dB	
Rejection Frequency, Low Side	DC		17.2 GHz
Rejection, Low Side	50 dB		
Rejection Frequency, High Side	20.7 GHz		31.0 GHz
Rejection, High Side	50 dB		
Rejection from 27.5 to 31.0 GHz	50 dB	90 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

Mechanical Specifications:

Item	Specification
Waveguide Port	WR-42 Waveguide with UG-595/U Compatible Flange
Insertion Length	3.7"
Material	Brass
Finish	Gold Plated
Weight	5.9 Oz
Outline	WF-BK-3.7-SX1

ECCN

EAR99

FEATURES

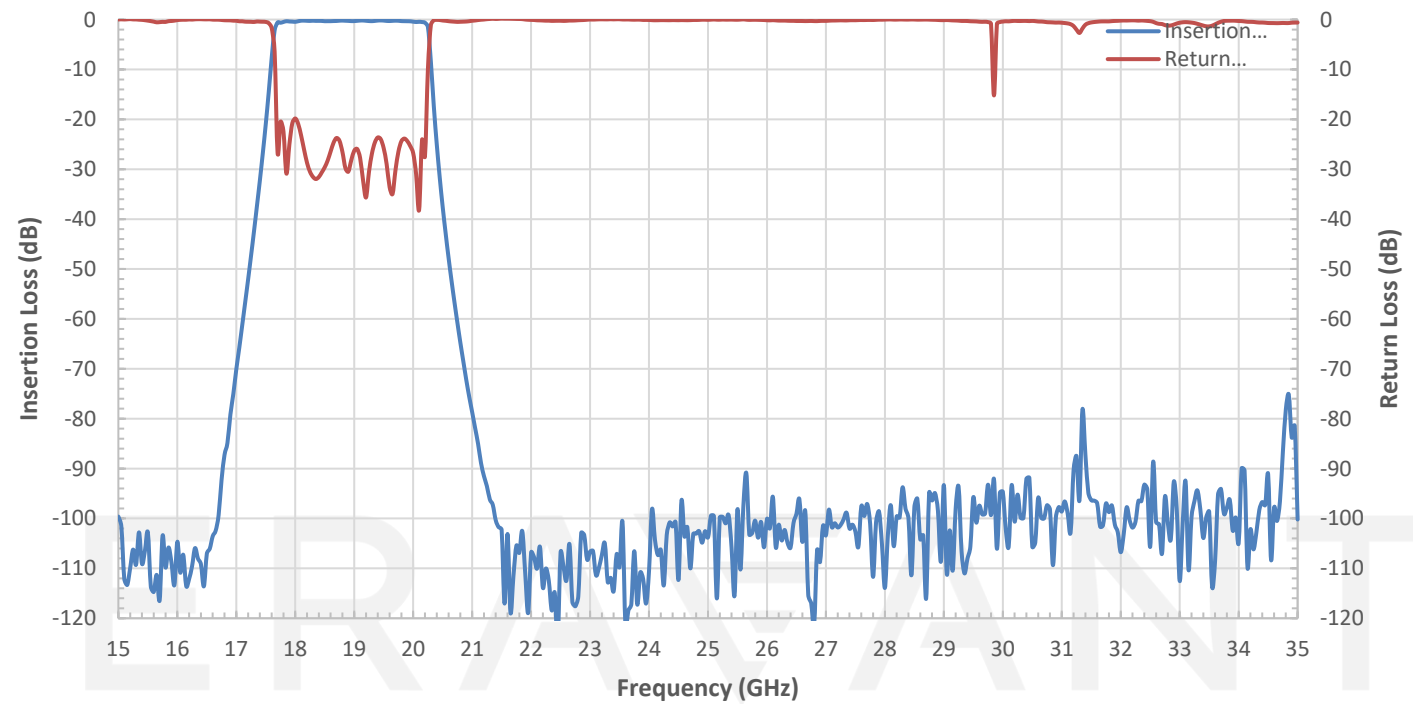
- Low Insertion Loss
- High Rejection

APPLICATIONS

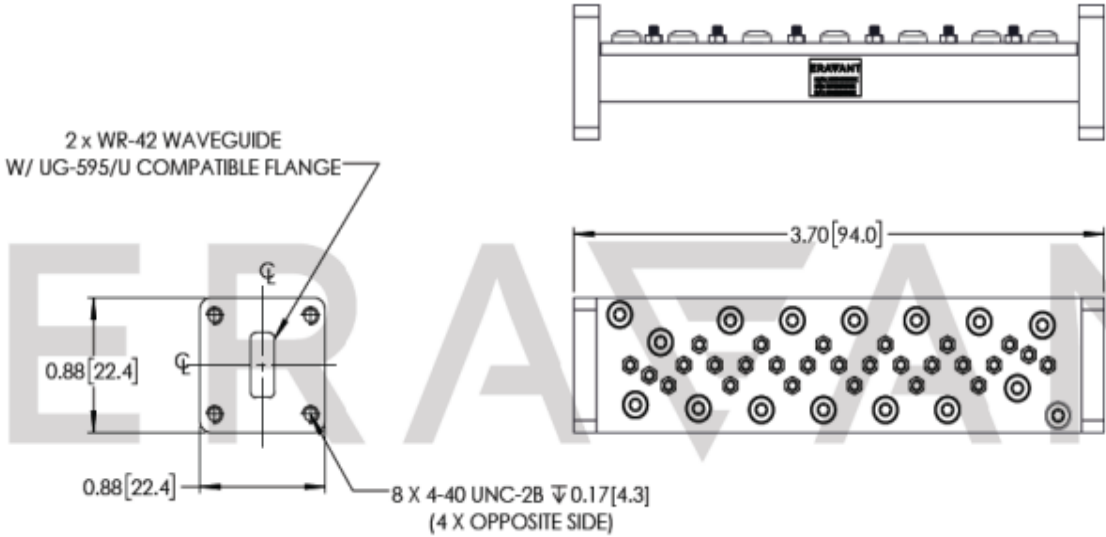
- Communication Systems
- Instrumentations
- Sub-assemblies

SUPPLEMENTAL DETAILS

Typical Performance 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.

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