

## Waveguide Bandpass Filter, Ka Band, 27.5 to 32.5 GHz

**SWF-30305340-28-B1** is a Ka band waveguide bandpass filter with a passband frequency of 27.5 to 32.5 GHz and rejection frequencies from 18.5 to 23.5 GHz and 36.5 to 41.5 GHz. The nominal insertion loss of the bandpass filter is 1.5 dB and the minimum 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.



## **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Passband Frequency	27.5 GHz		32.5 GHz
Passband Insertion Loss		1.5 dB	
Passband Ripple		±0.4 dB	
Rejection Frequency, Low Side	18.5 GHz		23.5 GHz
Rejection Frequency, High Side	36.5 GHz		41.5 GHz
Rejection	40 dB		
Passband Return Loss		14 dB	
Power Handling			100 W (CW)
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

## **Mechanical Specifications:**

Item	Specification	
Waveguide Port	WR-28 Waveguide with UG-599/U Flange	
Material	Brass	
Finish	Gold Plated	
Weight	3.2 Oz	
Size	3.70" (L) x 0.75" (W) x 0.75" (H)	
Outline	WF-BA-3.7	

### **ECCN**

EAR99

## **FEATURES**

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

## **APPLICATIONS**

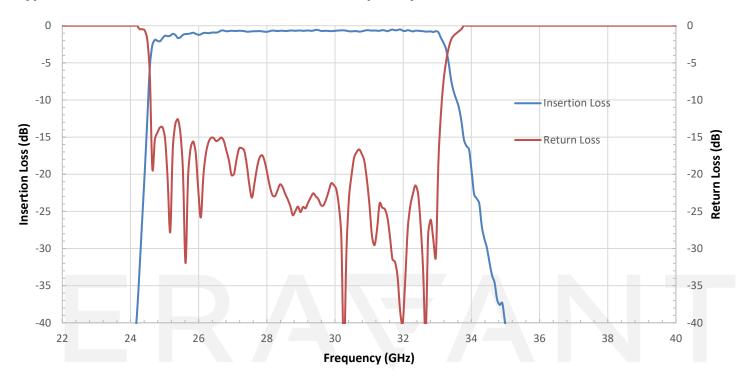
- Communication Systems
- Radar Systems
- Sub-assemblies

#### SUPPLEMENTAL DETAILS

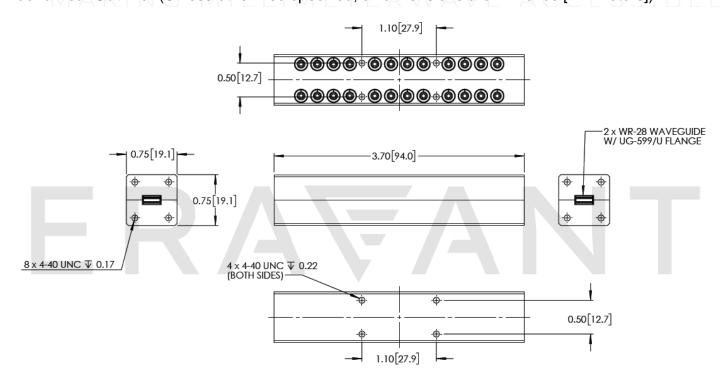


## 

## Typical Insertion Loss and Return Loss 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.

## ERAFANT

MAKING MILLIMETERWAVE ACCESSIBLE

# ERAFANT

MAKING MILLIMETERWAVE ACCESSIBLE