

### WR-34 Linear to Circular Polarizer, 22 to 33 GHz

**SAS-283-39634-F1** is a 3 band, linear to circular polarizer that operates from 22 GHz to 33 GHz. The polarizer offers a typical insertion loss of 0.5 dB, typical axial ratio of 1.2 dB, and a typical return loss of 20 dB. The polarizer is fixed and can be used for either right-handed or left-handed polarization based on the direction of the input signal. The polarizer is often combined with Eravant's rectangular to circular waveguide transition (SWT-34396-SB).



## **Electrical Specifications:**

Parameter	Minimum	Typical	Maximum
Frequency Range	22 GHz		33 GHz
Insertion Loss		0.5 dB	
Axial Ratio		1.2	
Return Loss		20 dB	
Specification Temperature		+25°C	
Operating Temperature	-40°C		+85°C

# **Mechanical Specifications:**

Item	Specification		
RF Ports	Ø0.396" Circular Waveguide with UG-1530/U Flange		
Material	Brass		
Finish	Gold Plated		
Weight	0.6 Oz		
Outline	AS-F3F-396		

**ECCN** 

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### **FEATURES**

- Full band Coverage
- Compact Size
- Good Axial Ratio

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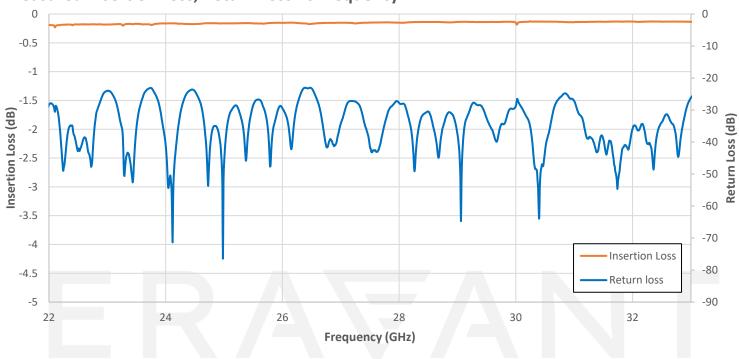
#### **APPLICATIONS**

- Antenna Ranges
- Waveguide Polarization selection
- Communication systems

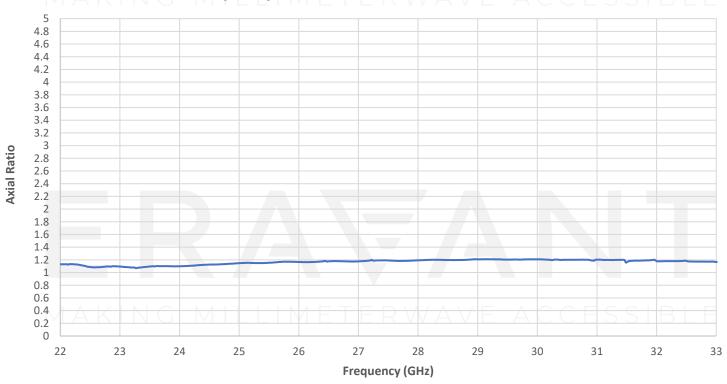
#### **SUPPLEMENTAL DETAILS**



# Measured Insertion Loss, Return Loss Vs Frequency



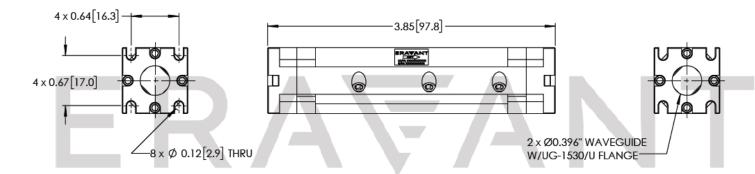
# Measured Axial Ratio Vs Frequency





### **Mechanical Outline:**

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



### NOTE:

- Test data provided is collected from a sample lot. Actual data may vary slightly from unit to unit. All testing is performed under +25 °C room temperature.
- Eravant reserves the right to change the information presented without notice.

#### CAUTION:

Any foreign objects in the waveguide will cause performance degradation.

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MAKING MILLIMETERWAVE ACCESSIBLE