SAS-753-14112-F1

WR-12 Linear to Circular Polarizer, 60 to 90 GHz

SAS-753-14112-F1 is an E band, linear to circular polarizer that operates from 60 GHz to 90 GHz. The polarizer offers a typical insertion loss of 1.0 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-12141-SB**)

Electrical Specifications:

Parameter	Minimum	Typical	Maximum
Frequency Range	60 GHz		90 GHz
Insertion Loss		1.0 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	Ø 0.141" Waveguide with UG-387/U Anti-Cocking Flange
Material	Brass
Finish	Gold Plated
Weight	0.8 Oz
Outline	AS-FEF-141-A

ECCN

EAR99

FEATURES

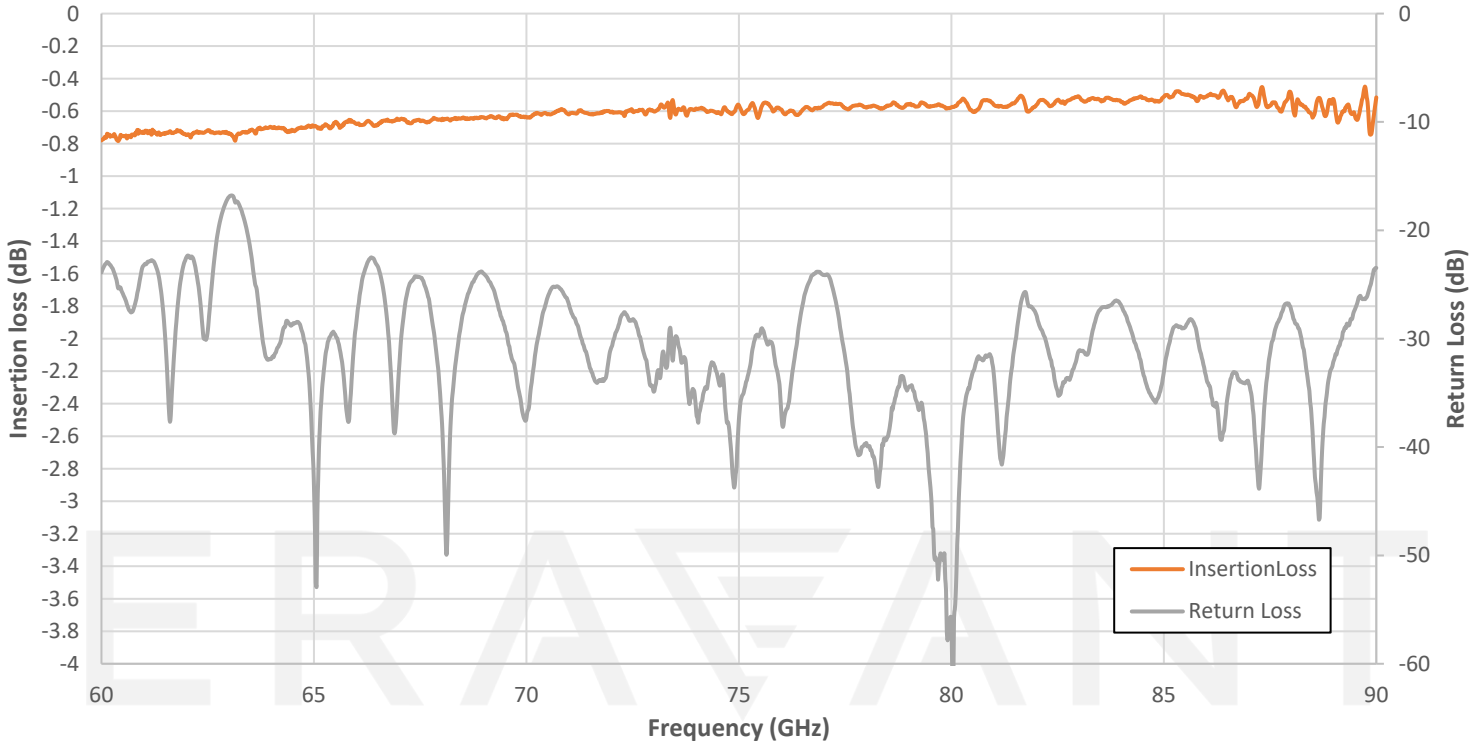
- Full Band Coverage
- Compact Size
- Good Axial Ratio

APPLICATIONS

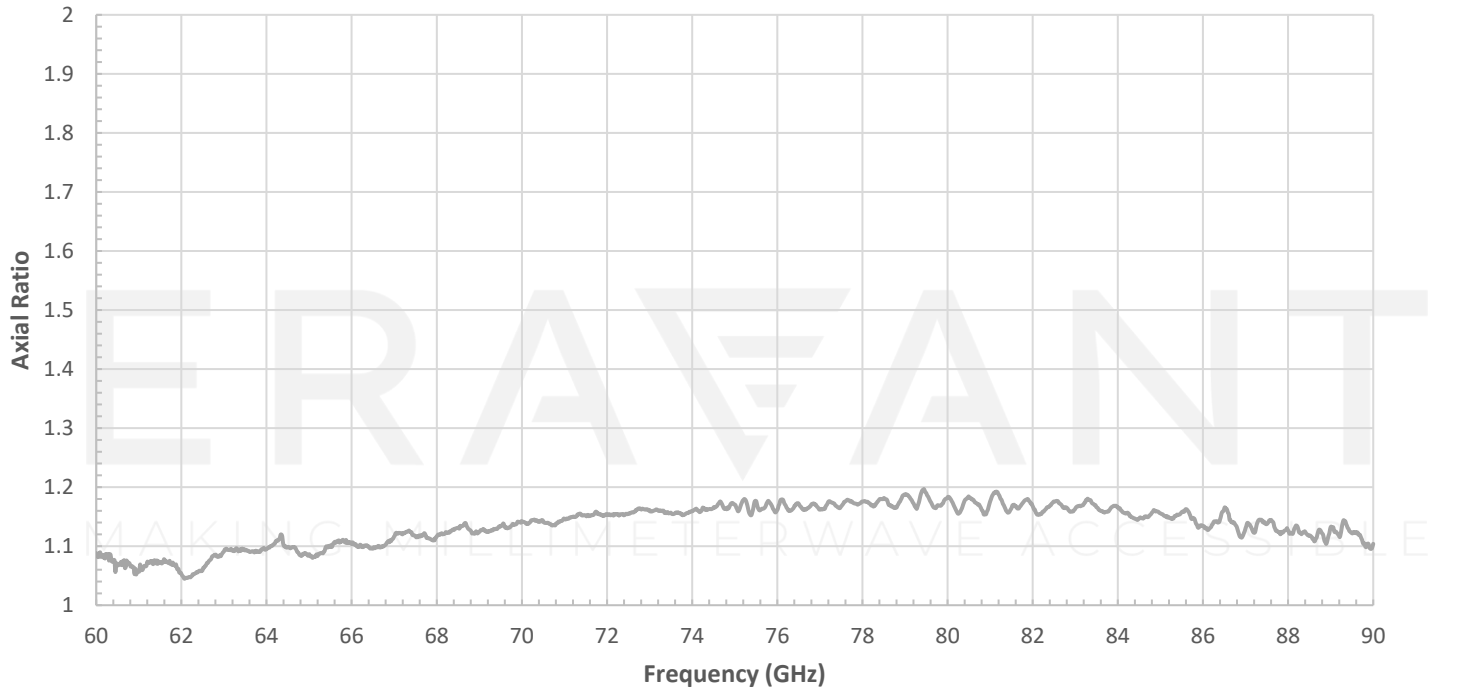
- Antenna Ranges
- Waveguide Polarization Selection
- Communication Systems

SUPPLEMENTAL DETAILS

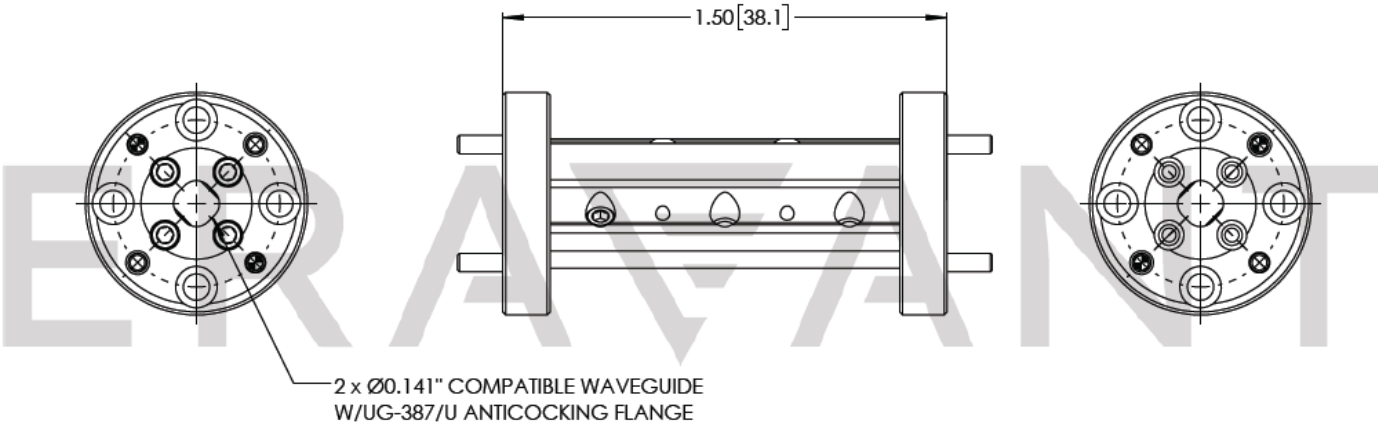
Measured Insertion loss and Return Loss vs Frequency



Measured Axial Ratio vs. Frequency



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



NOTE:

- The Polarizer is offered as LHCP. However, it can be used as RHCP by reversing the input and output ports.
- 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:

- If a waveguide is present, any foreign objects in the waveguide will cause performance degradation and may damage or destroy the unit.