

E-BAND LINEAR-CIRCULAR POLARIZER POL-12-R1251



FEATURES:

- Low insertion loss and axial ratio
- Full communication band operation

APPLICATIONS:

- Antenna Assemblies
- Point-to-Point Radios
- Instrumentation & Metrology
- Atmospheric Science

DESCRIPTION

Millitech’s high performance E-Band Linear-to-Circular Polarizer offers a low axial ratio of < 0.6 dB, a low insertion loss of < 0.5 dB, and a typical VSWR of 1.25:1 within the high and low unlicensed communication bands (71 – 86 GHz).

This polarizer can be optimized for any frequency you require from 18 – 110 GHz and above.

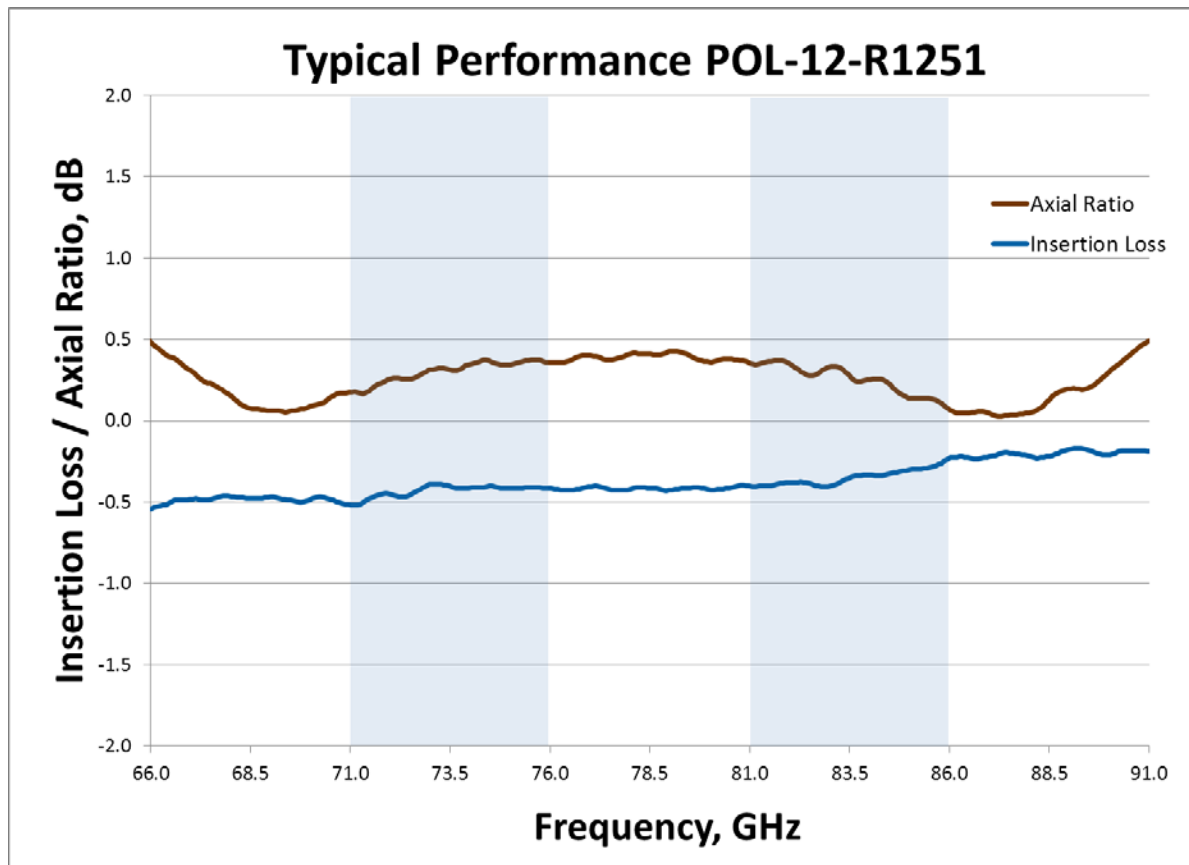
This polarizer covers nearly 2X the bandwidth and has 0.4 dB better axial

ratio. We specify maximum insertion loss of 0.6 dB and Industry leading axial ratio performance.

This best-in-class polarizer is 1-inch long and can easily be integrated with Millitech’s other products that use 0.125 inch circular waveguide, including our Orthomode Transducer (OMT), Scalar Horn (SFH), and Millitech’s Cassegrain Reflector Antenna (CRA) or Gaussian Optics Lens Antenna (GOA).

ELECTRICAL SPECIFICATIONS

Performance Parameter	Linear-circular
Frequency range (GHz)	71 - 86
Axial ratio, Full bandwidth (dB) (max)	0.6
Insertion Loss, Full band (dB) (max)	0.5
VSWR (typ)	1.25:1



COMPLIMENTARY COMPONENTS

**FULL E-BAND ORTHOMODE TRANSDUCER
(OMT-12-125BC)**

**CIRCULAR-TO-RECTANGULAR WAVEGUIDE ADAPTER
(WAC-12-R125R)**

**DIPLEXER [BAND 1: 71-76GHZ, BAND 2: 81-86GHZ]
(DPL-12-RE004)**

**DUAL-POLARIZATION ANTENNA [60 – 90 GHz]
(DPA-12-60900)**

**SPARTAN TEST MODULE SET
(STM-12-SM000, STM-12-RM000, STM-12-00000)**