

## KU BAND POLARIZER & OMT

### OVERVIEW

The Ku band polarizer and OMT (orthogonal mode transducer) is an integrated device offering the functionality of dual-frequency polarization conversion and channel duplexing. This is a very compact design, low in mass and easy for manufacturing.

This device works in a very wide frequency band. It can be used for the same frequency operation (Ku transmit or receive), or different frequency bands (one for transmit and the other for receive).

Higher isolations between ports can be achieved by the addition of waveguide filters.

### KEY FEATURES

- OMT and polarizer integrated in-one
- Wide frequency bandwidth
- Identical dual rectangular waveguide ports
- Orthogonal circular polarization
- Compact design
- Low axial ratio
- Low insertion loss
- Low PIM design
- Low risk multipactions design

### CONTACT US

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### DESIGN AND PROTOTYPE UNIT



### SPECIFICATIONS

Parameter	Specification	Note
Frequency [1] (GHz)	10.7 – 15.7	
Polarization	Dual linear	At waveguide ports
	Dual circular	At common port
Insertion loss (dB)	0.1	
Return loss (dB)	-15	
Isolation (dB)	20	Between ports, same frequency band
Axial ratio (dB)	1	
PIM	Low	Low PIM design
Port [2]	3	2x individual ports (Rx and/or Tx), 1x common port
Dimension (mm)	40x40x40	Including the WG flange
Mass (g)	<100	

[1] Other frequency band is available

[2] Other type of interface is available on request

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