



Dual Polarized Horn Antenna  
20 dBi Gain, 75GHz-110GHz Frequency Range

## Dual Polarized Horn Antenna Data

**MT-DPHA75110-20**

### Features

- Full Band Performance
- Dual Polarization
- High Isolation
- Precisely Machined and Gold Plated

### Description

The **MT-DPHA75110-20** from Microtech is a full-band, dual-polarized, WR-10 horn antenna assembly that operates in the frequency range of 75 GHz to 110 GHz. The antenna features an integrated orthogonal mode converter that provides high port isolation. The MT-DPHA75110-20 supports vertical and horizontal waveguide orientations and has a typical 35 dB cross-polarization suppression, a nominal gain of 20 dBi at the center frequency, a typical 3db beamwidth of 16 degrees in the E-plane, a typical 3db beamwidth of 18 degrees in the H-plane. The input to the antenna is a WR-10 waveguide with a UG-385/U-M threaded flange.

### Specifications

MT-DPHA75110-20		
Item	Specification	Units
Frequency Range	75-110	GHz
Gain	20	dBi
VSWR	1.4:1	
Polarization	Dual	
Horizontal 3dB Beam Width	33	Degrees
Vertical 3dB Beam Width	22	Degrees
Port Isolation	45	dB
Waveguide Size	WR-10	
Flange Designation	UG-387/U-Mod	
Size	27.90*61.20	mm
Weight	77	g
Body Material and Finish	Cu, Gold	

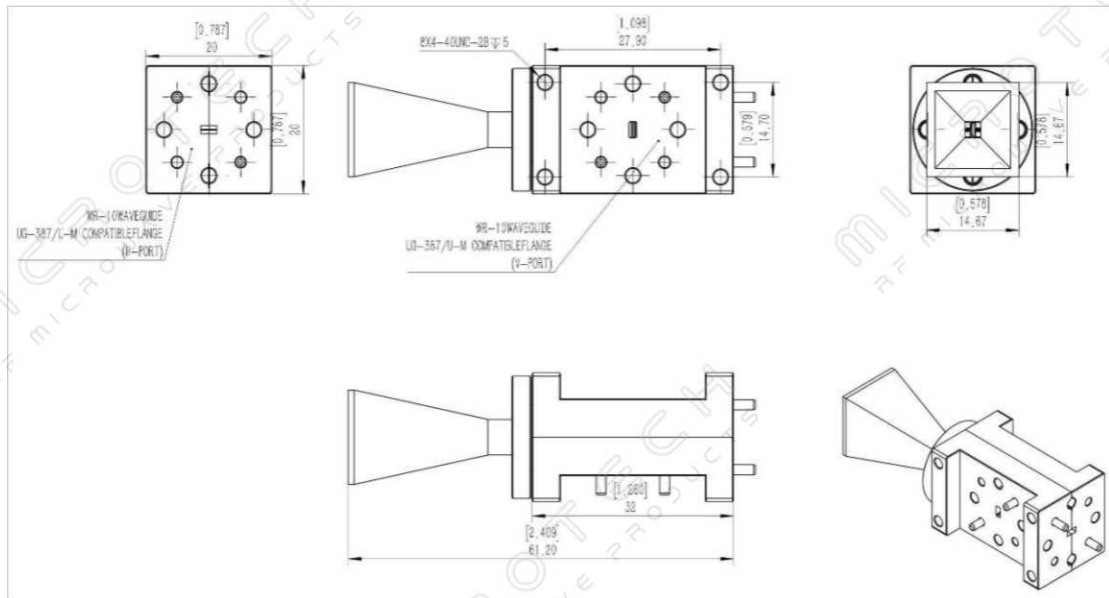


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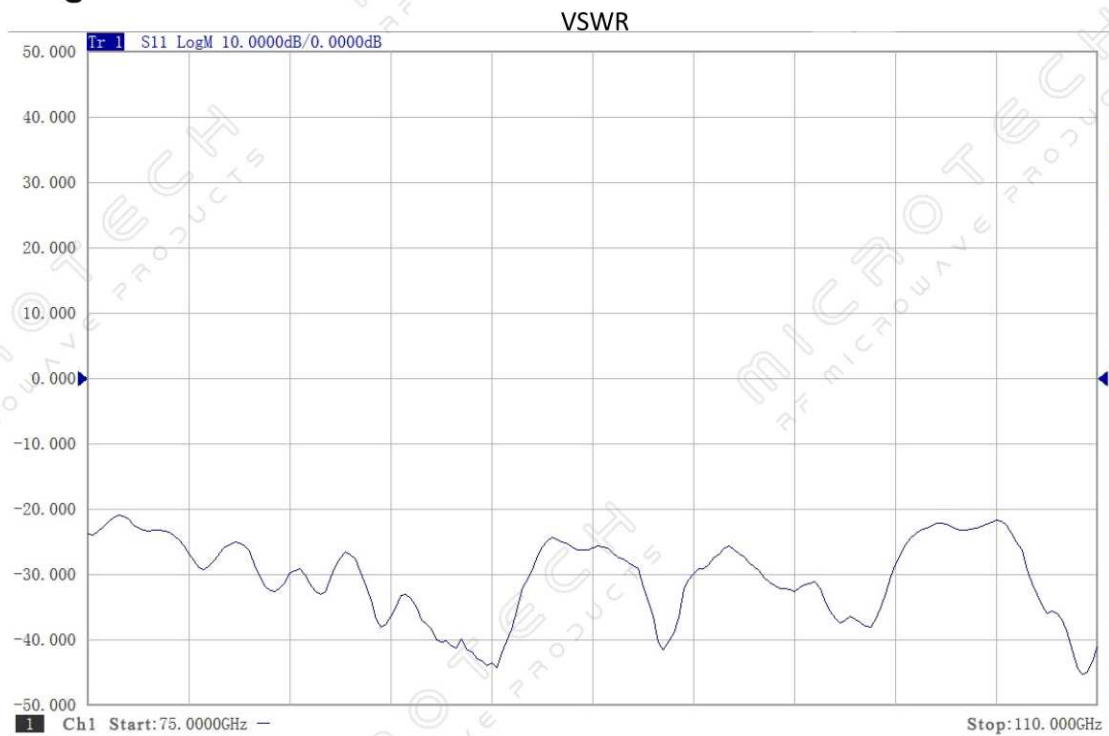
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**Outline Drawing**



**Testing Result**



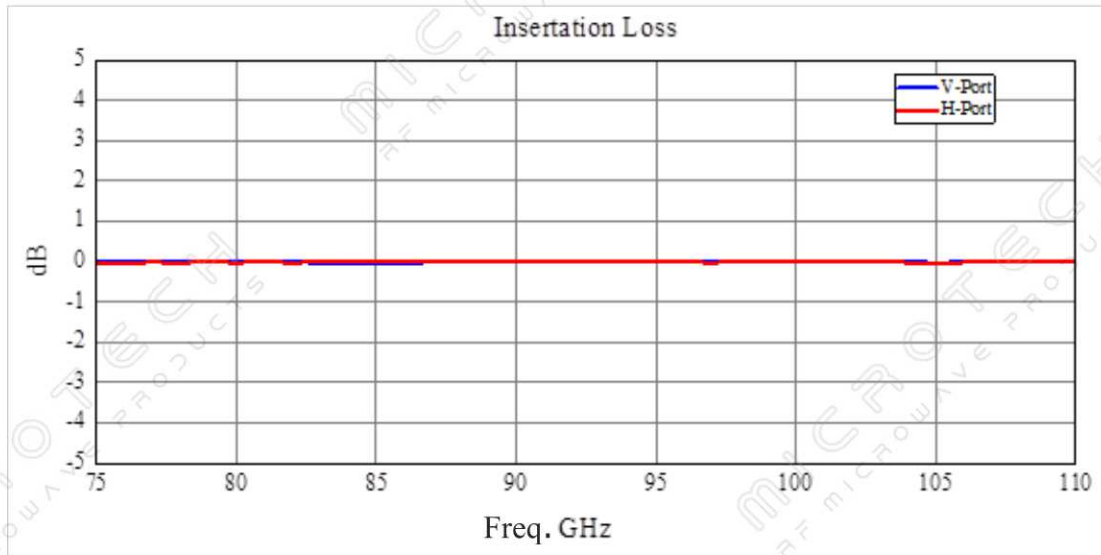
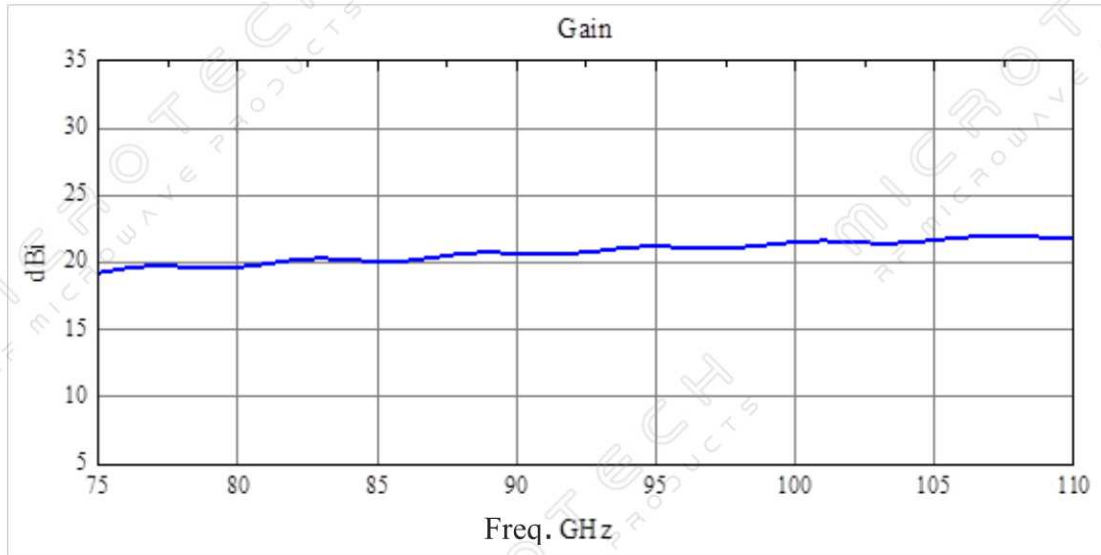


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**Simulated Data**

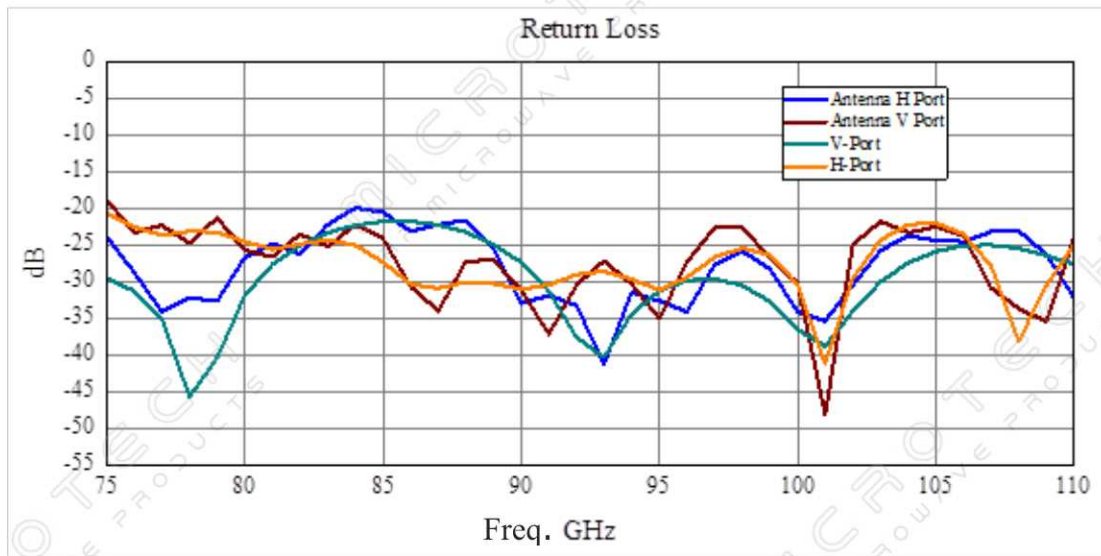
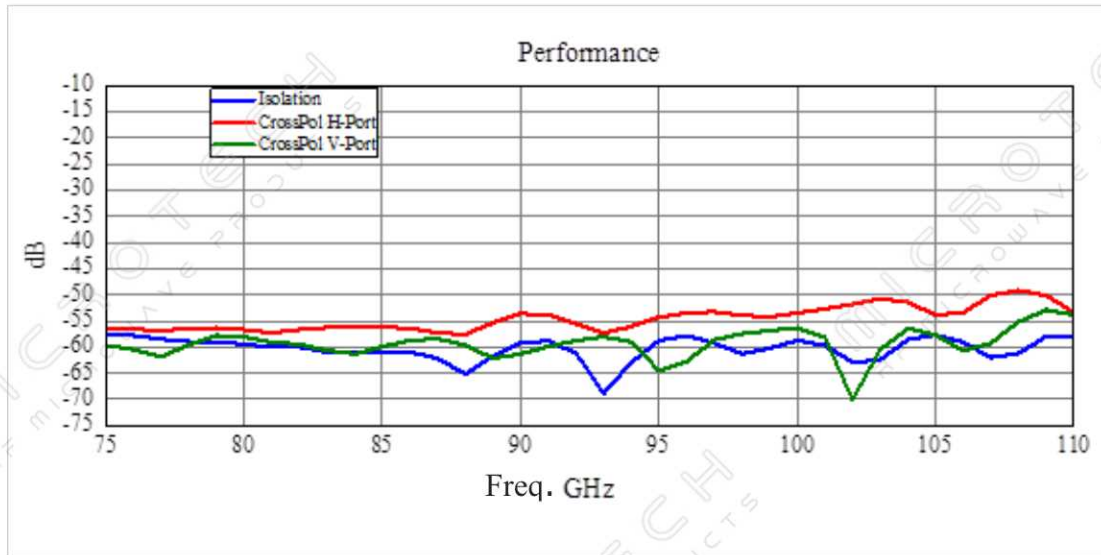




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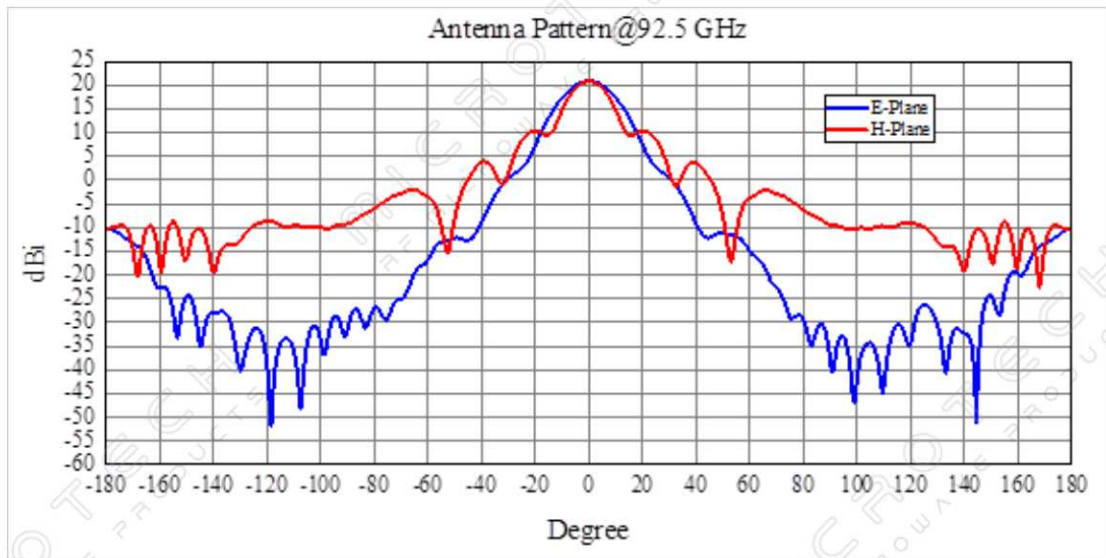
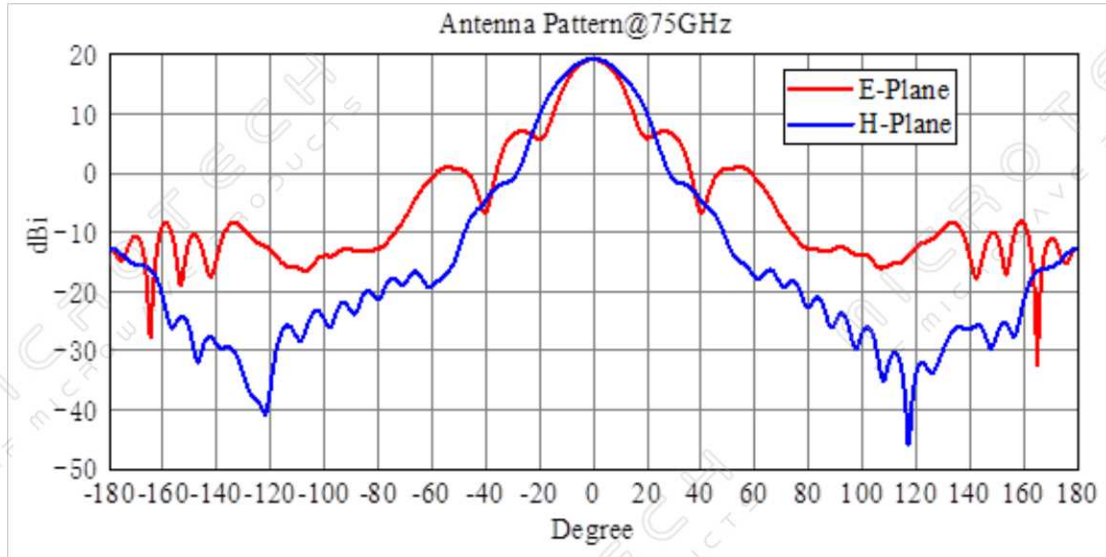




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