

High-Gain Lens Horn Antenna

WR-1.9/470-550GHz/42.8dBi Gain

Model:TL-1.9SHA-DZ

The TL-1.9SHA-DZ consists of a rectangular waveguide feed with a high-quality standard flange, which radiates electromagnetic waves to a plano-convex polytetrafluoroethylene (PTFE) lens. The lens is used for phase collimation and achieving excellent performance with minimal size. The lens adopts an optimized hyperbolic design to minimize aberrations. The entire system is enclosed in an aluminum cylinder, providing high ruggedness. One side of the cylinder is flat, allowing the antenna to stand upright on flat surfaces.

Features:

- Operating Frequency 470 to 550GHz
- Nominal IF Gain: 42.8dBi Min
- High Return Loss

Applications:

- Radar/Communication Systems
- Antenna Gain Measurements
- System Setups

Electrical Characteristics:

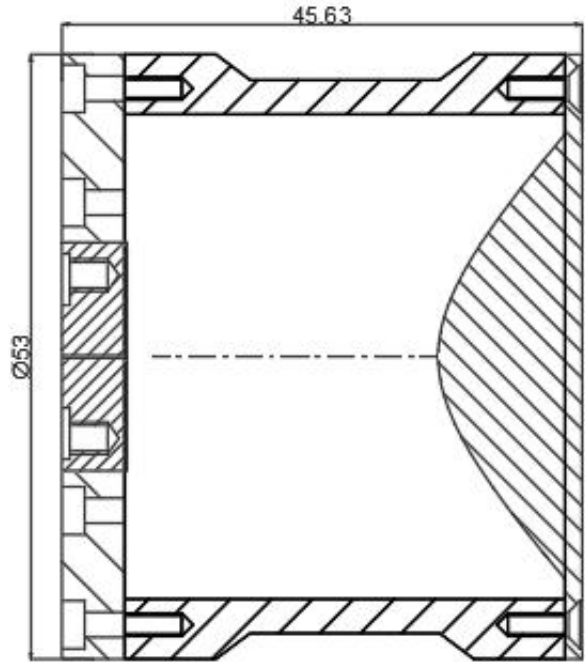
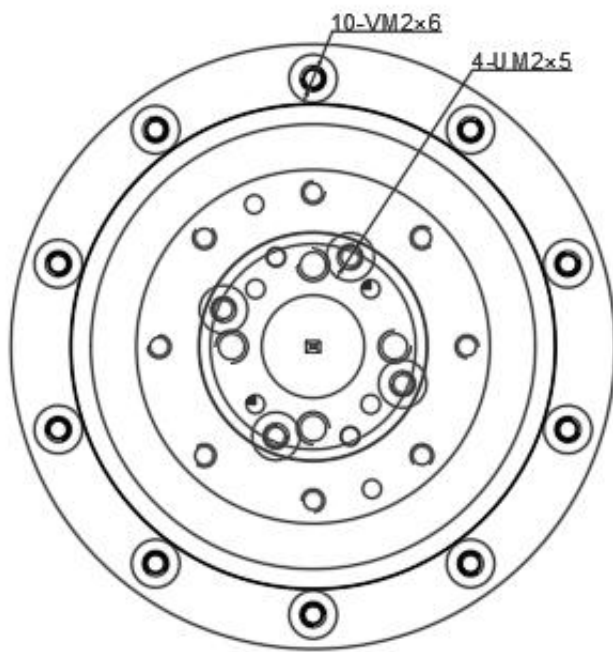
Parameter	Min	Typ	Max	Units
Frequency Range	470		550	GHz
Gain	42.8		44.1	dBi
VSWR			1.5	:1
3dB Antenna Beamwidth	1		1.2	°

Environmental And Physical Characteristics:

Description	Parameter	Units
Material	Aluminium	
Finish	Conductivity oxide	
Connectors	WR-1.9/UG-387/U	
Size	ø53*45.63	mm

Outline Drawing:

Unit:mm



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

Ordering Information:

Base Number	Description	Revision
TL-1.9SHA-DZ	High-Gain Lens Horn Antenna, 470-550GHz, Gain: 42.8dBi Min	Rev.1.0