

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

电气特性 Electrical Characteristics:

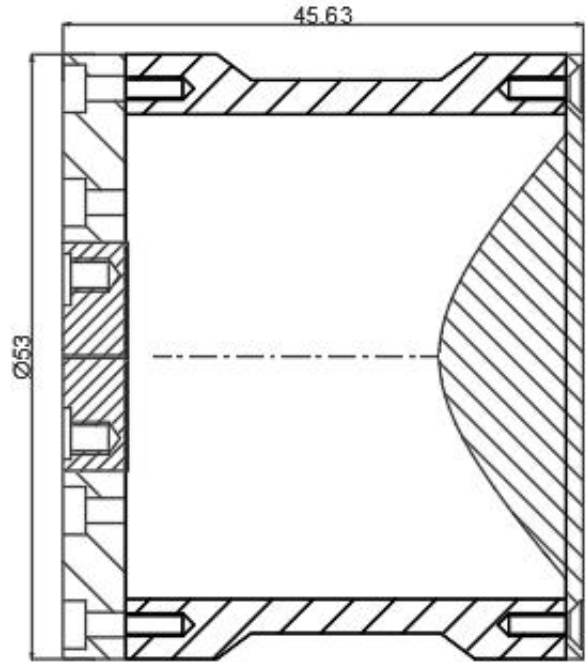
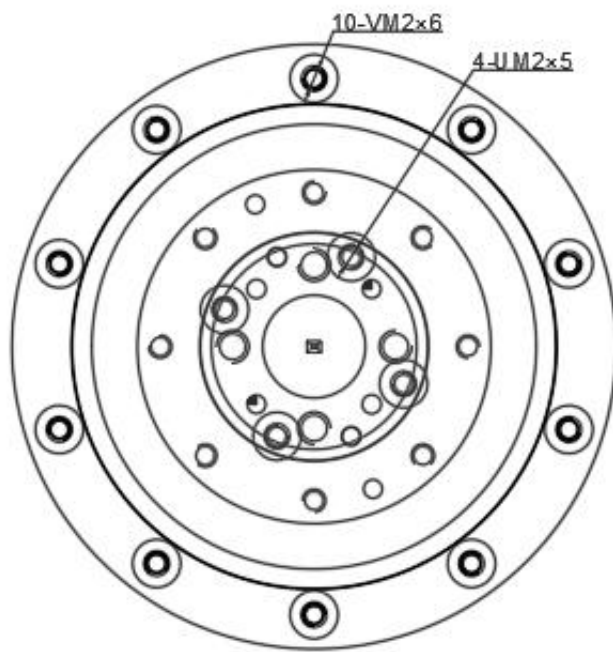
参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency Range	470		550	GHz
增益 Gain	42.8		44.1	dBi
驻波 VSWR			1.5	:1
3dB波束宽度 3dB Antenna Beamwidth	1		1.2	°

环境和机械特性 Environmental And Physical Characteristics:

类型 Description	参数 Parameter	单位 Units
材质 Material	Aluminium	
表面处理 Finish	Conductivity oxide	
接口 Connectors	WR-1.9/UG-387/U	
尺寸 Size	ø53*45.63	mm

外形图 Outline Drawing:

Unit:mm



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

订货信息 Ordering Information:

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