

U-Band Fixed Attenuator

WR-19/40-60GHz/20 $\pm$ 1.5dB Attenuation

Model: TLFA-20-WR19

TLFA-20-WR19 is a 20 dB fixed attenuator that is used in millimeterwave systems and operates from 40 to 60 GHz. The input and output port configuration offers an inline structure with WR-19 waveguides and UG-383/U-M anticocking flanges. Other attenuation values are available under different model numbers as TLFA-XX-WR19, where XX is the desired attenuation value.

Features:

- Full Band Coverage
- 1-35dB Available
- Good attenuation flatness
- Good Return Loss

Applications:

- Test Equipment
- RF Over Fiber
- Communication Systems
- Radar Systems

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	40		60	GHz
衰减量 Attenuation Value		20		dB
衰减平坦度 Attenuation Flatness		± 1.5		dB
回波损耗 Return Loss		-20		dB
功率容量 Power Handling			100	mW
标称温度 Specification Temperature		+25		°C

机械特性 Mechanical Specifications:

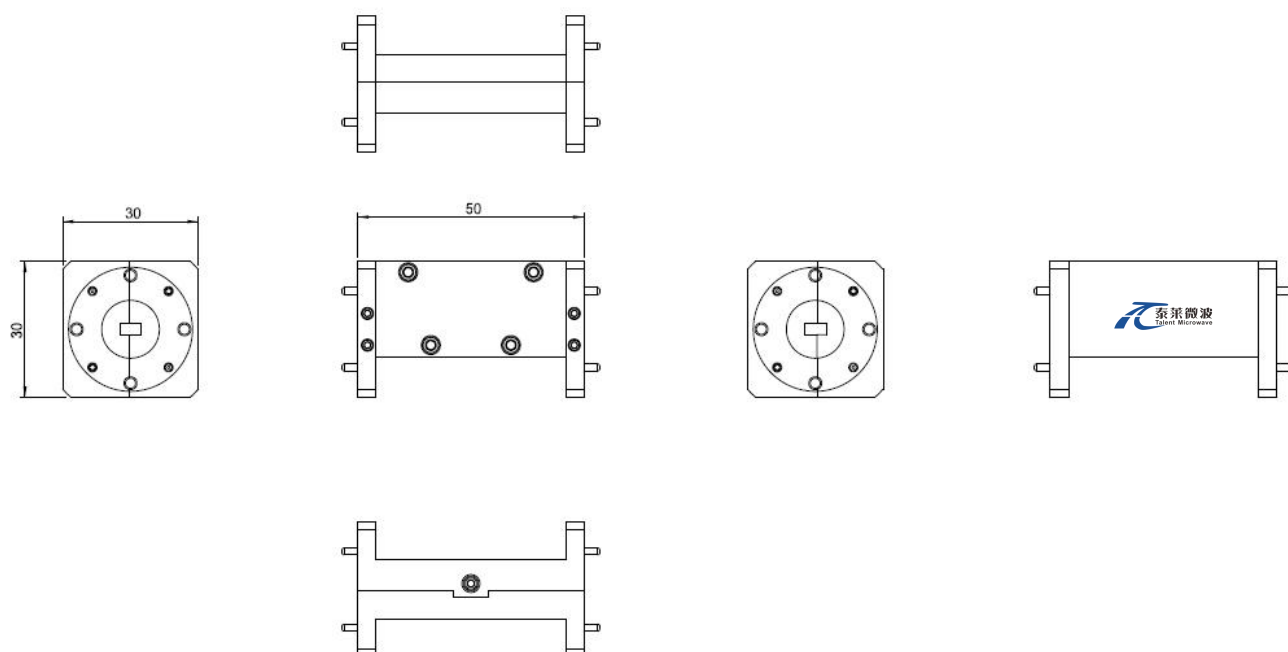
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	WR-19/UG-383/U-M	
材质 Material	Brass	
表面处理 Finish	Gold Plated	
尺寸 Size	50x30x30	mm

绝对最大值 Absolute Maximum Ratings:

参数 Parameter	指标 Value
输入功率 RF Input Power	+20dBm

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



温度环境 Environmental Conditions:

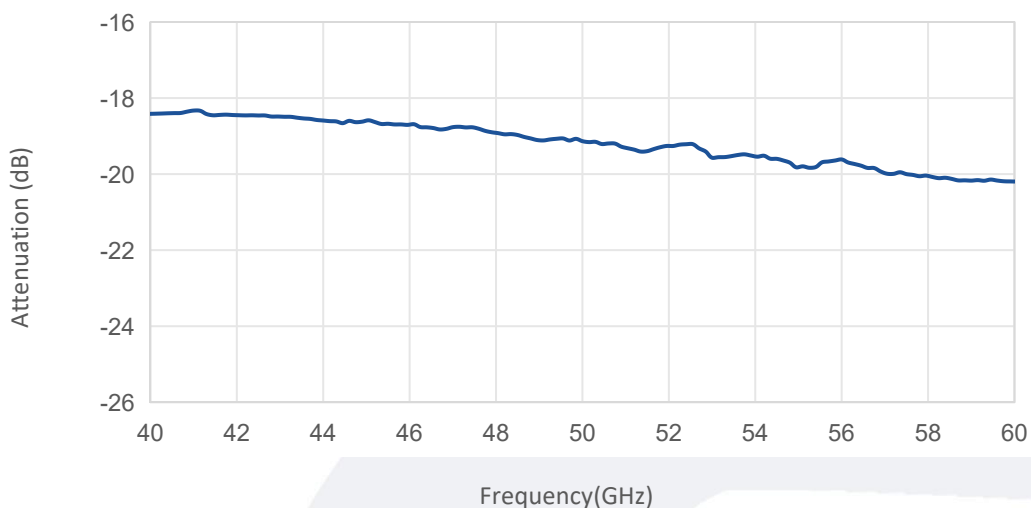
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-10		+65	°C
存储温度 Non-operating Temperature	-45		+85	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

订货信息 Ordering Information:

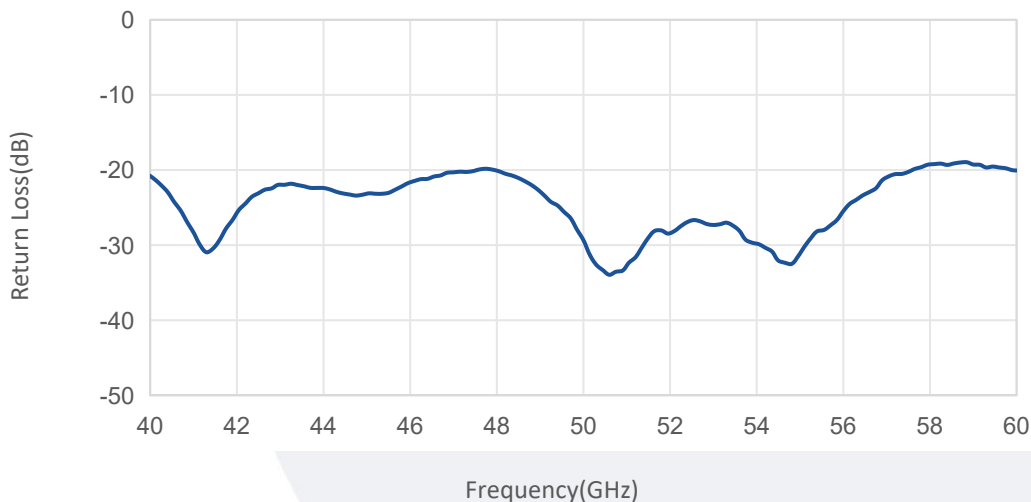
标准型号 Base Number	描述 Description	版本号 Revision
TLFA-20-WR19	WR-19 Waveguide Fixed Attenuators; 40-60GHz, $20\pm1.5\text{dB}$ Attenuation	Rev.1.0

典型曲线 Typical Performance Data:

Attenuation vs Frequency



Return Loss vs Frequency



Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.