

**Model: TLDA0.1G50G-62-6-USB**
**Digital Attenuator**  
**0.1-50 GHz, 6-Bit, 0.5 dB LSB, 63 dB Range**
**Feature:**

- Ultra Wide Band: 0.1-50GHz
- 6-Bit, 0.5 dB LSB, 63 dB Range
- Low Insertion Loss
- High Attenuator Accuracy

**电气特性 Electrical Specifications:**

参数Parameter		Min	Typ	Max	单位Units
频率范围 Frequency range		0.1-50			GHz
插损 Insertion Loss	@0.1-20GHz		10		dB
	@20-40GHz		15		
	@40-50GHz		20		
衰减范围 Attenuation Range		63			dB
控制位数 Control Bit TTL		6			Bit
衰减步进 Attenuation Step		0.5			dB
切换速度 Switch Speed			3		ms
输入驻波 Input VSWR			2.2	2.5	:1
输出驻波 Output VSWR			2.2	2.5	:1
最大输入功率 Input Max Power				27	dBm
直流电压 DC Voltage		USB供电			V DC
直流电流 DC Supply Current		USB供电			mA
阻抗 Impedance		50			Ohms

**机械特性 Mechanical Specifications:**

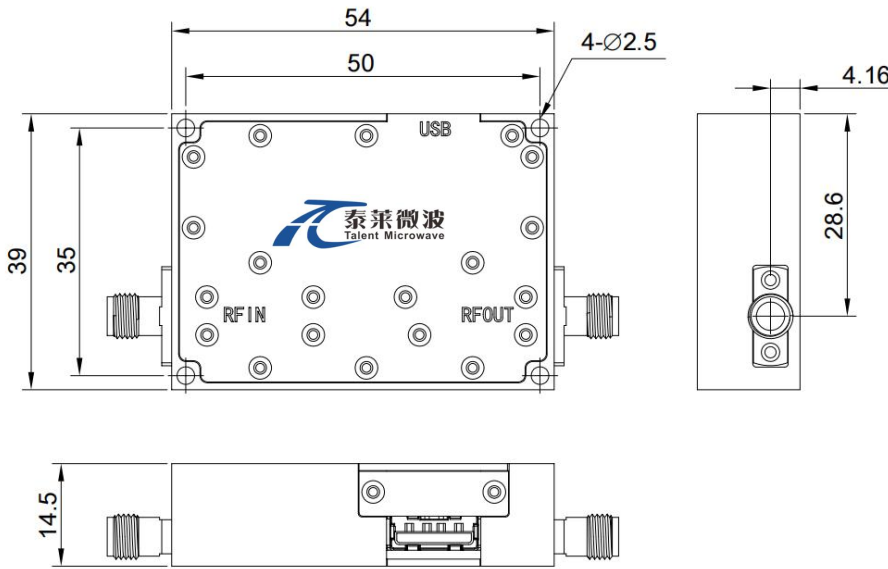
参数 Parameter	指标 Value	单位 Units
输入/输出接口 Input /Output Connector	2.4mm Female/2.4mm Female	
DC控制接口 DC control interface	USB 2.0 Type A	
尺寸 Size	/	mm
重量 Weight	70	g

**绝对最大值 Absolute Maximum Ratings:**

参数 Parameter	指标 Value
输入功率 RF Input Power	25 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸 Outline Drawing:

Unit: mm



上位机软件:



温度环境 Environmental Conditions:



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES

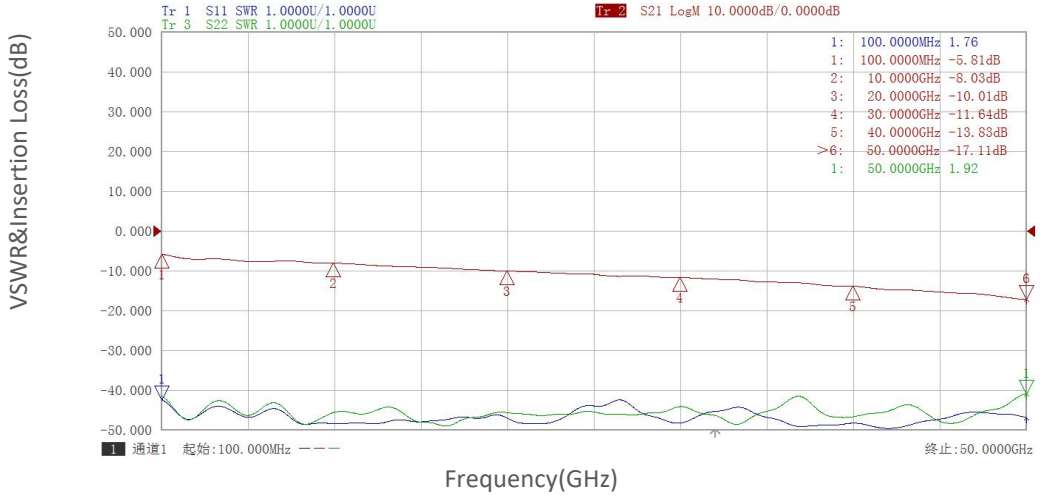
参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-45		+85	°C
存储温度 Non-operating Temperature	-55		+125	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	50,000			feet
震动 Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
冲击 Shock(non operating)	20G for 11msec half sin wave,3 axis both directions			

订货信息 Ordering Information:

标准型号 Part Number	描述 Description	版本号 Revision
TLDA0.1G50G-62-6	6-Bit Digital Digital Attenuator,0.1-50GHz,2.4mm Female	Rev.1.1

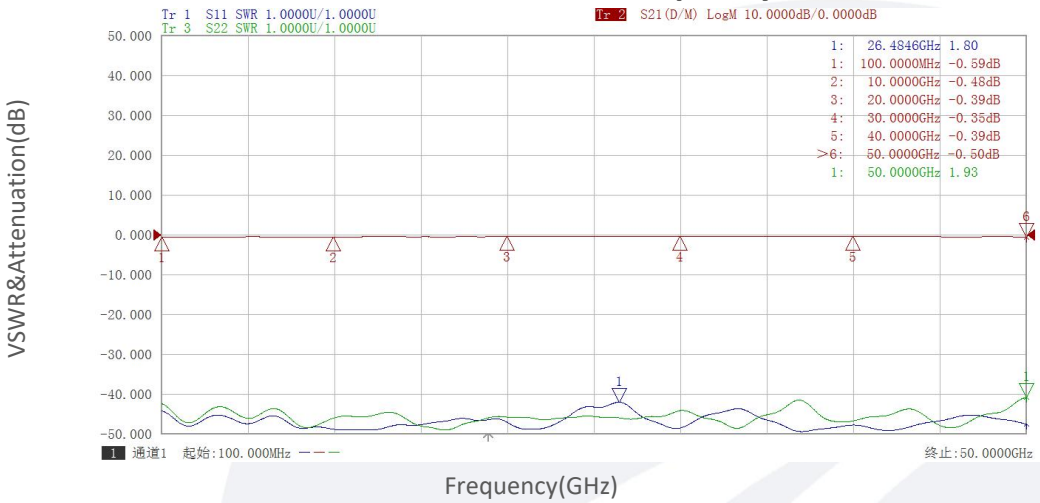
典型曲线 Typical Performance Data:

**VSWR&Insertion Loss vs Frequency**



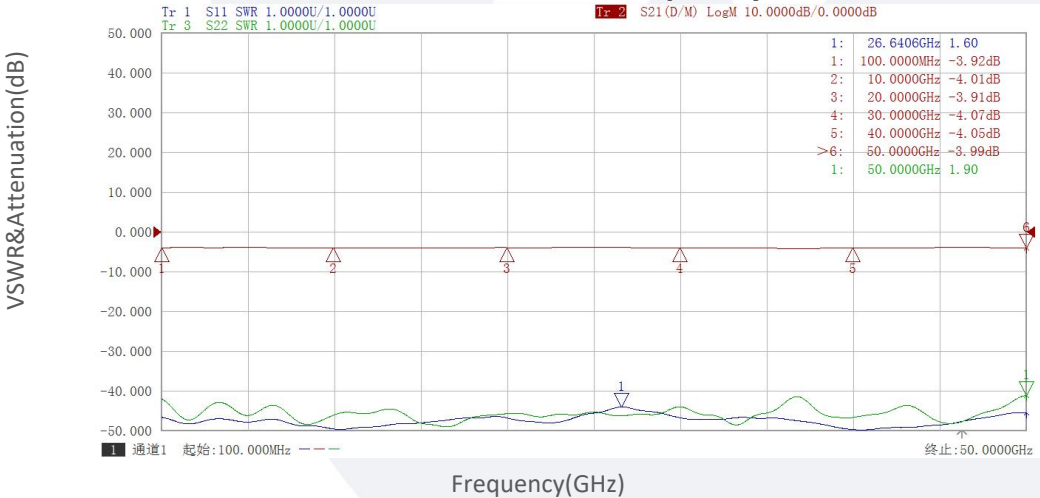
0.5dB:

**VSWR&Attenuation vs Frequency**



4dB:

**VSWR&Attenuation vs Frequency**

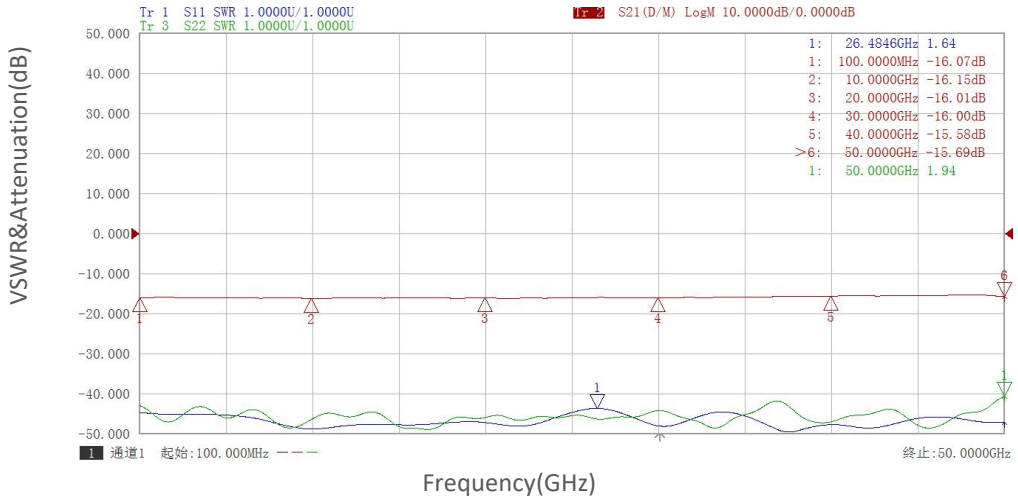


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

典型曲线 Typical Performance Data:

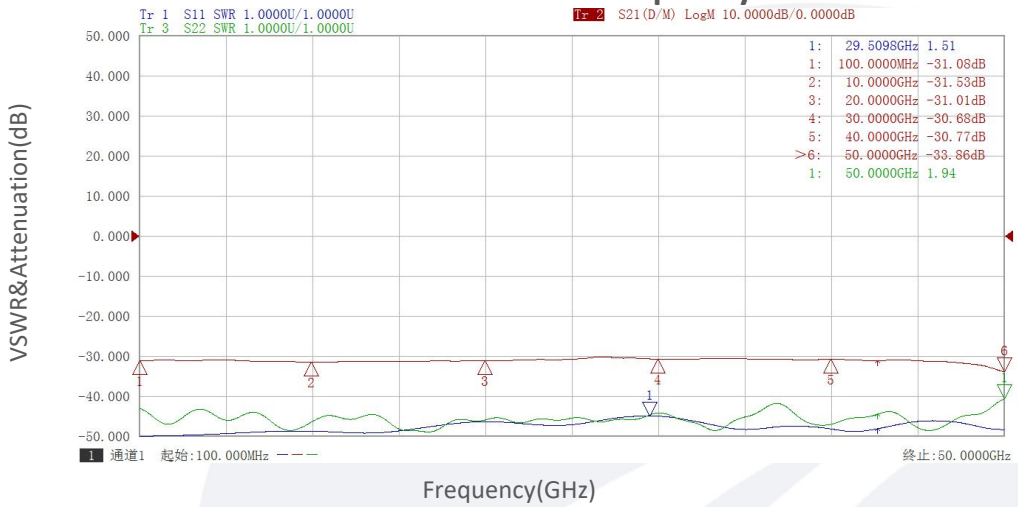
16dB:

VSWR&Attenuation vs Frequency



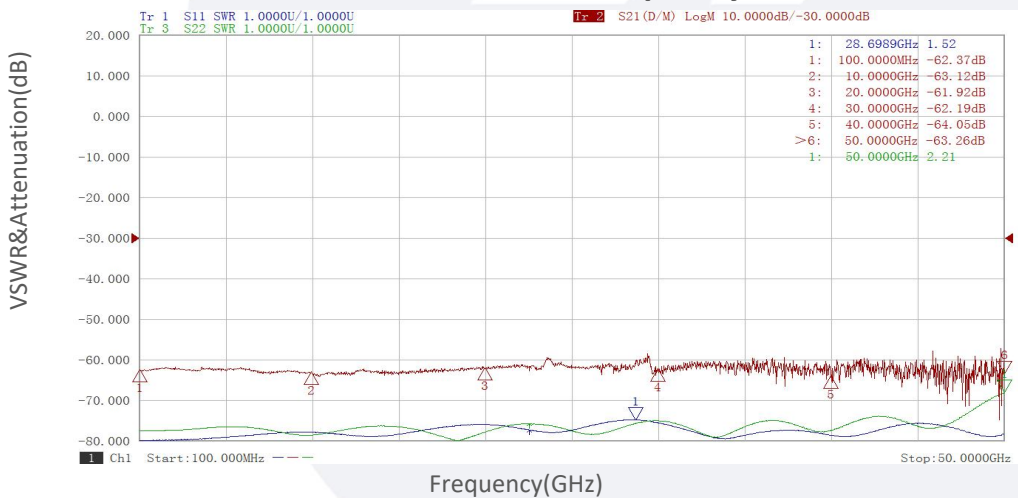
31.5dB:

VSWR&Attenuation vs Frequency



63dB:

VSWR&Attenuation vs Frequency



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