

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

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	0.1-50			GHz
Insertion Loss	@0.1-20GHz	10		dB
	@20-40GHz	15		
	@40-50GHz	20		
Attenuation Range	63			dB
Control Bit TTL	6			Bit
Attenuation Step	0.5			dB
Switch Speed		3		ms
Input VSWR		2.2	2.5	:1
Output VSWR		2.2	2.5	:1
Input Max Power			27	dBm
DC Voltage	USB power supply			V DC
DC Supply Current	USB power supply			mA
Impedance	50			Ohms

Mechanical Specifications:

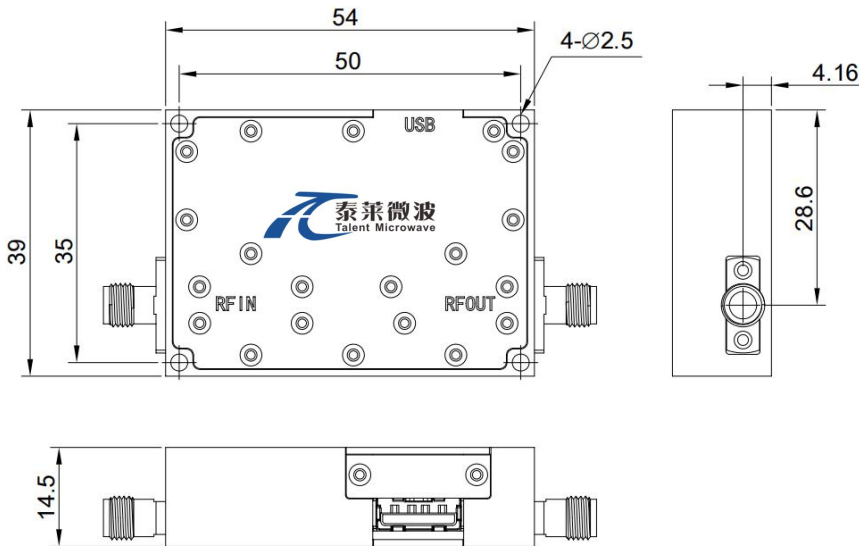
Parameter	Value	Units
Input /Output Connector	2.4mm Female/2.4mm Female	
DC control interface	USB 2.0 Type A	
Size	/	mm
Weight	70	g

Absolute Maximum Ratings:

Parameter	Value
RF Input Power	25 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: mm



upper computer software:



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Environmental Conditions:

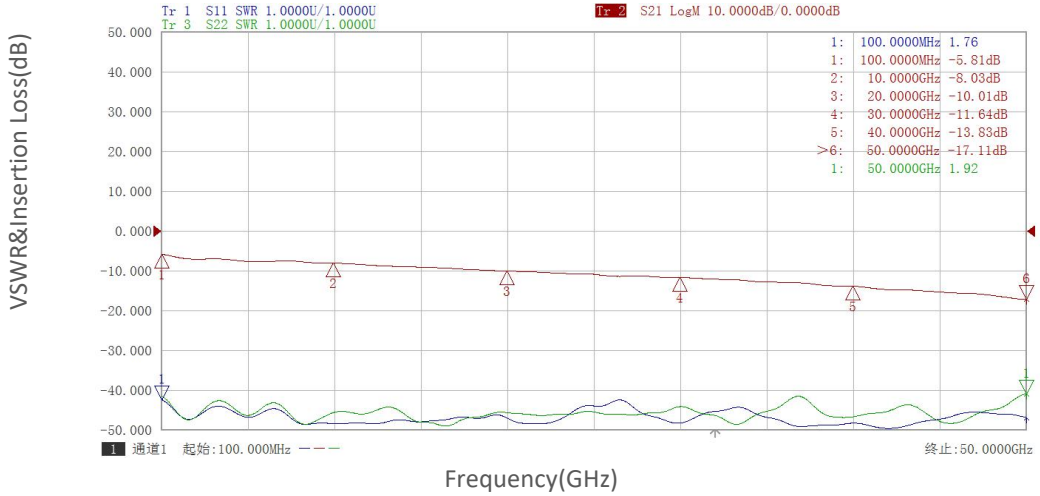
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	50,000			feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msec half sin wave,3 axis both directions			

Ordering Information:

Part Number	Description	Revision
TLDA0.1G50G-62-6	6-Bit Digital Digital Attenuator,0.1-50GHz,2.4mm Female	Rev.1.1

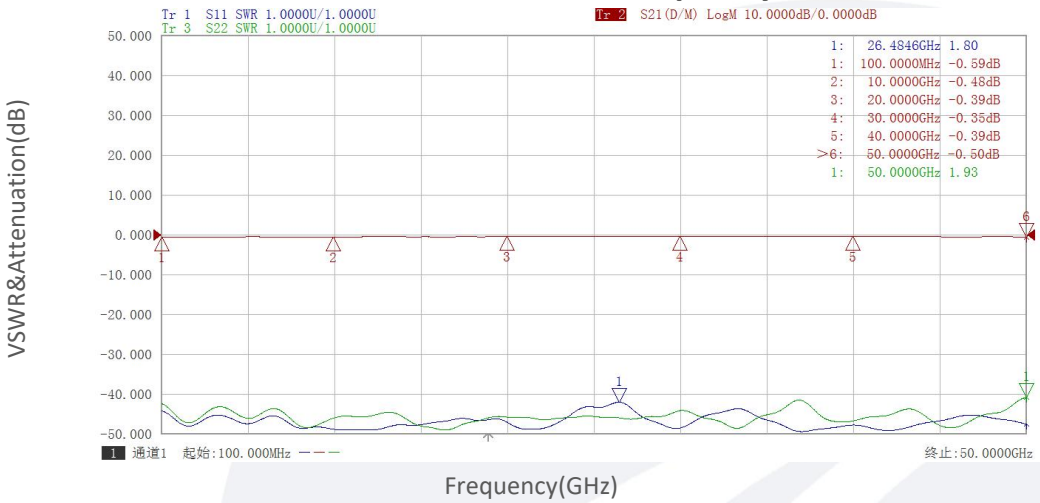
Typical Performance Data:

VSWR&Insertion Loss vs Frequency



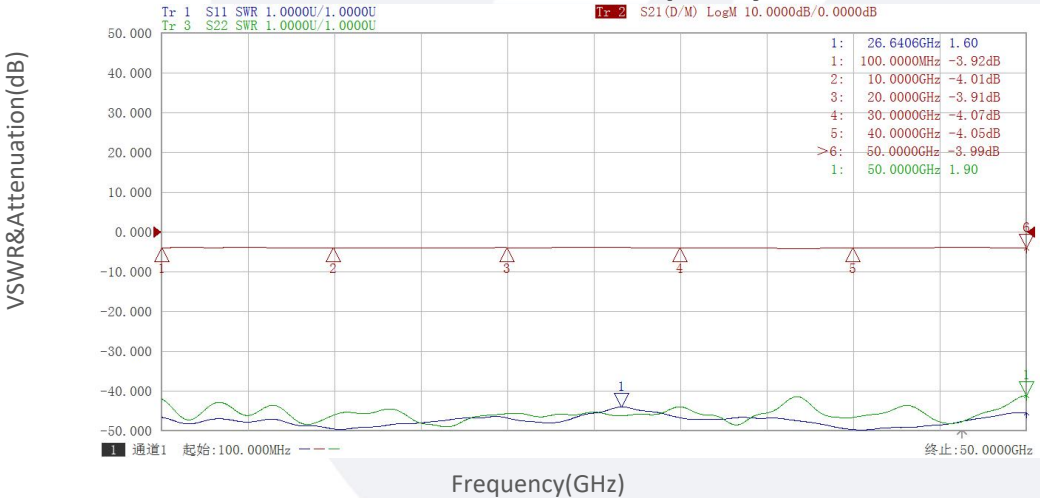
0.5dB:

VSWR&Attenuation vs Frequency



4dB:

VSWR&Attenuation vs Frequency

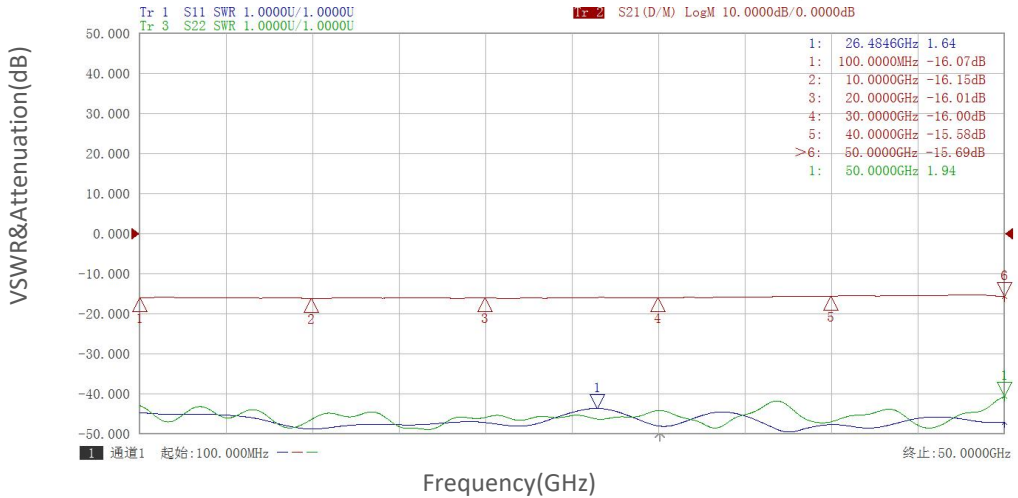


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

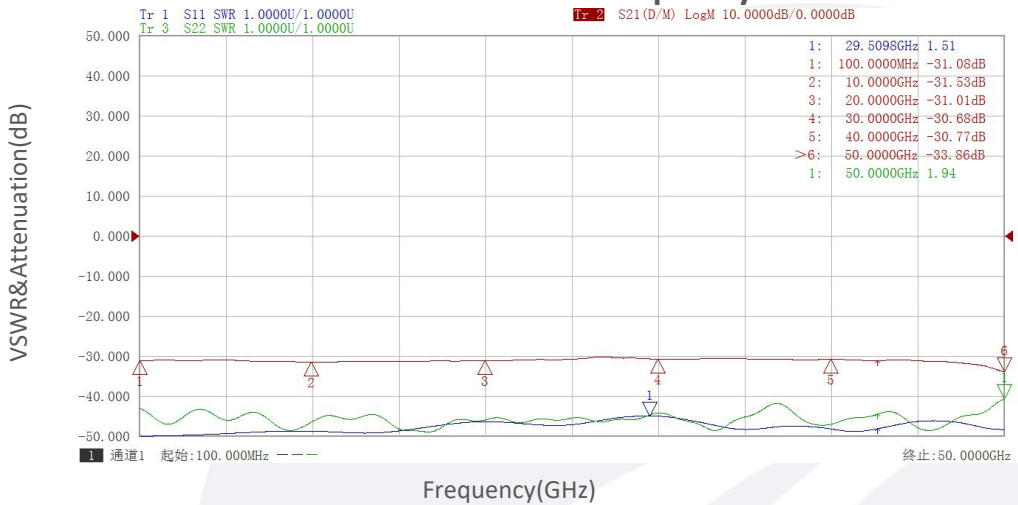
16dB:

VSWR&Attenuation vs Frequency



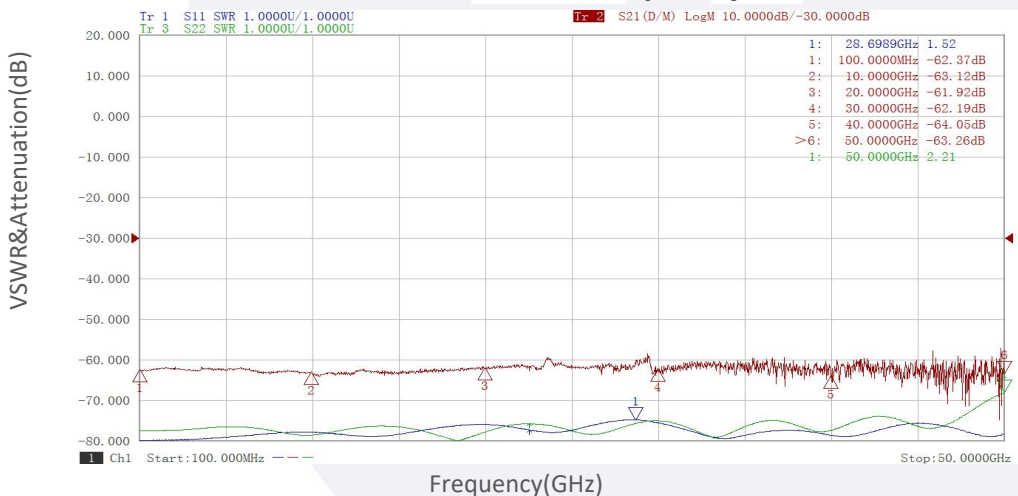
31.5dB:

VSWR&Attenuation vs Frequency



63dB:

VSWR&Attenuation vs Frequency



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