

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

- Ultra Wide Band: 0.1-50GHz
- 2 channel, 6-Bit, 0.5 dB LSB, 62 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		62			dB
Control Bit TTL		6			Bit
Attenuation Step		1			dB
Switch Speed			100		ns
Input VSWR			2.2	2.5	:1
Output VSWR			2.2	2.5	:1
Input Max Power				25	dBm
DC Supply		J30J-9ZKP			V DC
Impedance		50			Ohms

Mechanical Specifications:

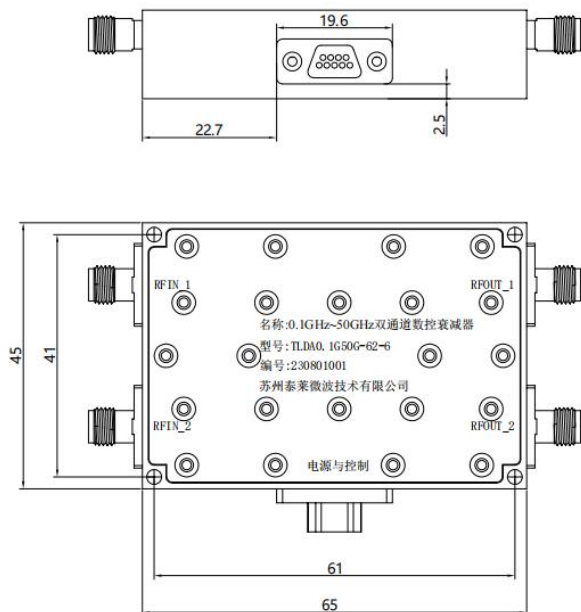
Parameter	Value	Units
Input /Output Connector	2.4mm Female/2.4mm Female	
Control Interface	J30J-9ZKP	
Size	65*45*15	mm
Weight	70	g

Absolute Maximum Ratings:

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

Outline Drawing:

Unit: mm



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES

Upper computer software:



Interface	Type	Pin	Definition
Power supply and control	J30J-9ZKP	1、6	+12V
		2、5、7、9	GND
		3	TX
		4	RX
		8	NC

Environmental Conditions:

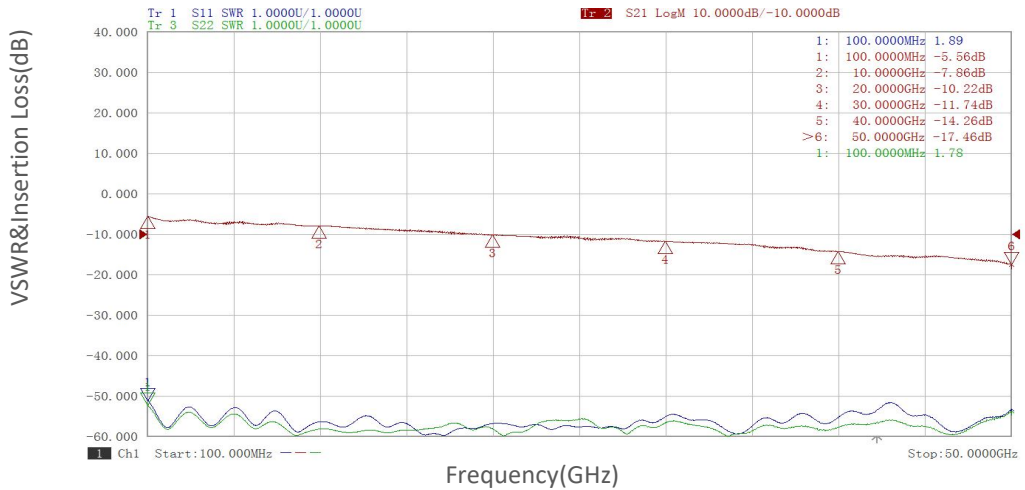
Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude		50,000		feet
Shock / Vibration(MIL-STD-810F)	25g rms (15 degree 2KHz) endurance, 1 hour per axis			
Shock(non operating)	20G for 11msc half sin wave,3 axis both directions			

Ordering Information:

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

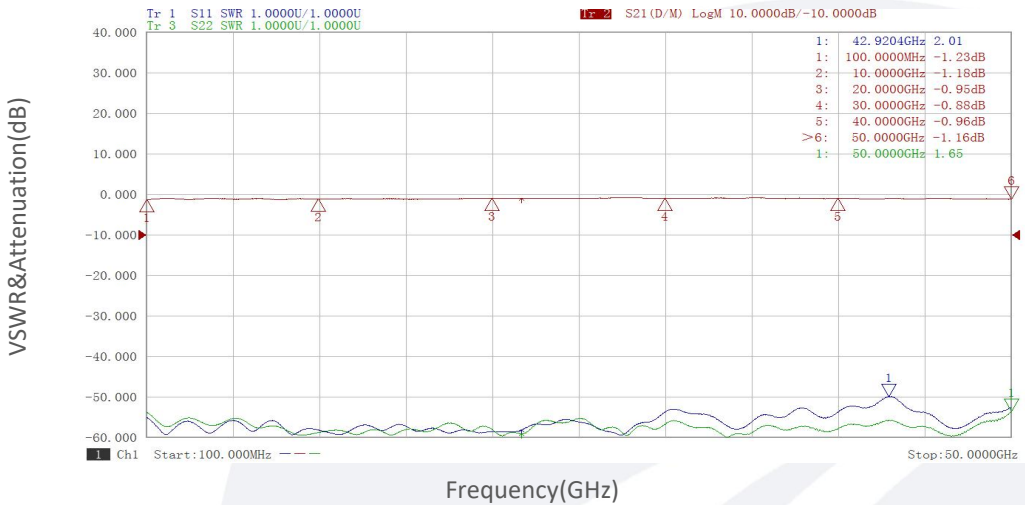
Typical Performance Data:

VSWR&Insertion Loss vs Frequency



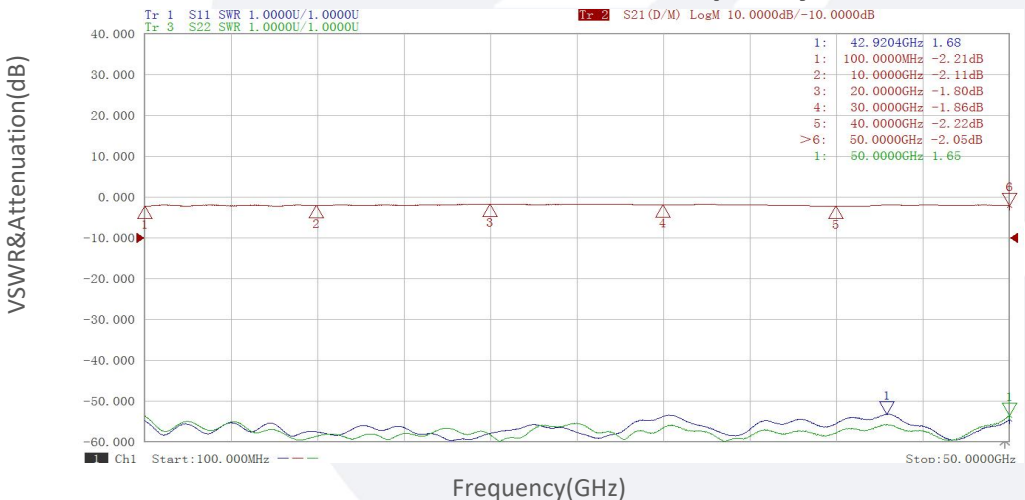
1dB:

VSWR&Attenuation vs Frequency



2dB:

VSWR&Attenuation vs Frequency

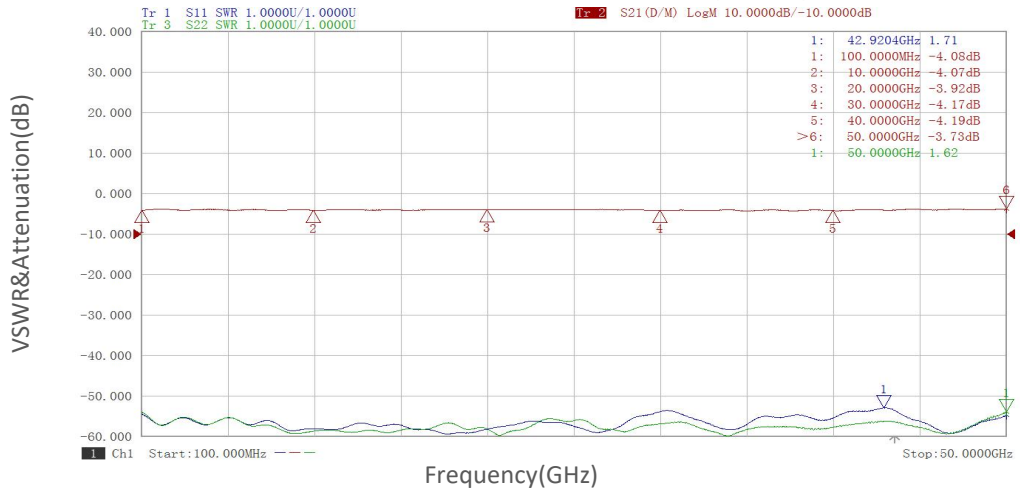


Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

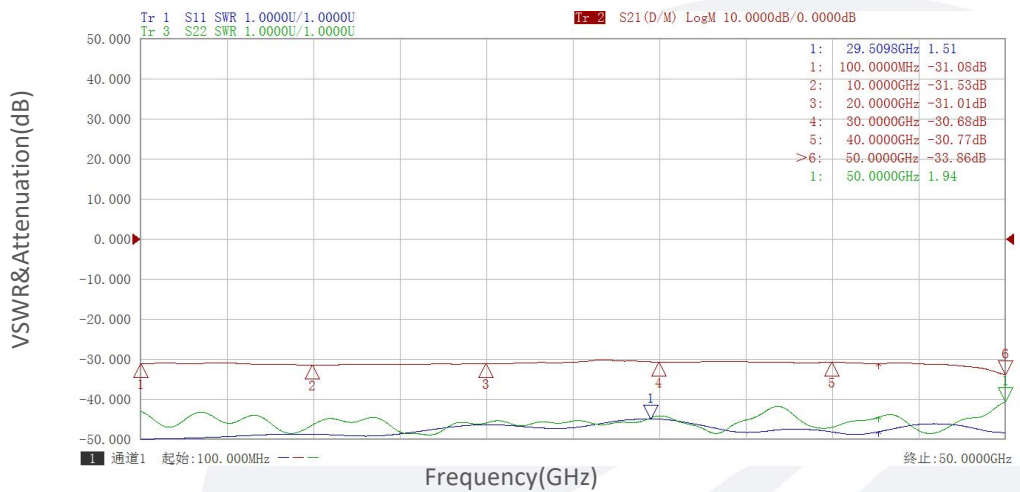
4dB:

VSWR&Attenuation vs Frequency



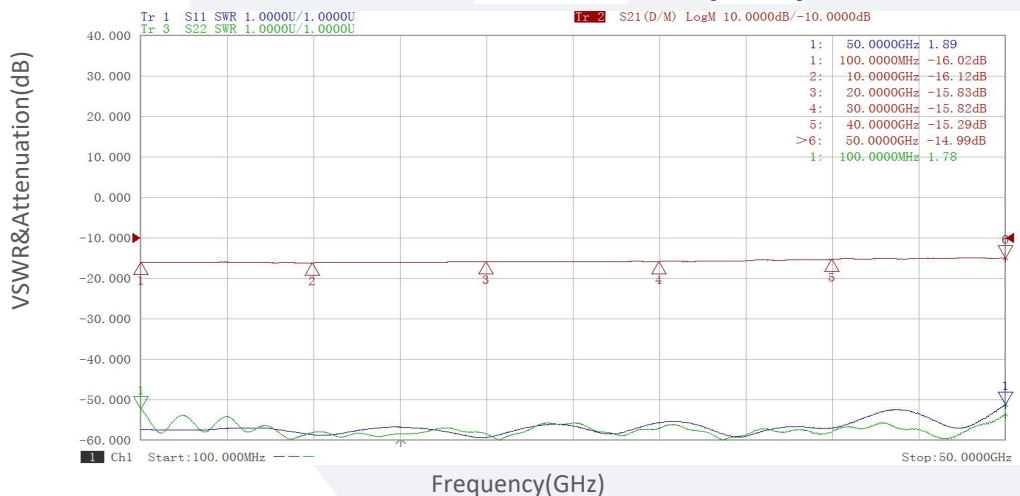
8dB:

VSWR&Attenuation vs Frequency



16dB:

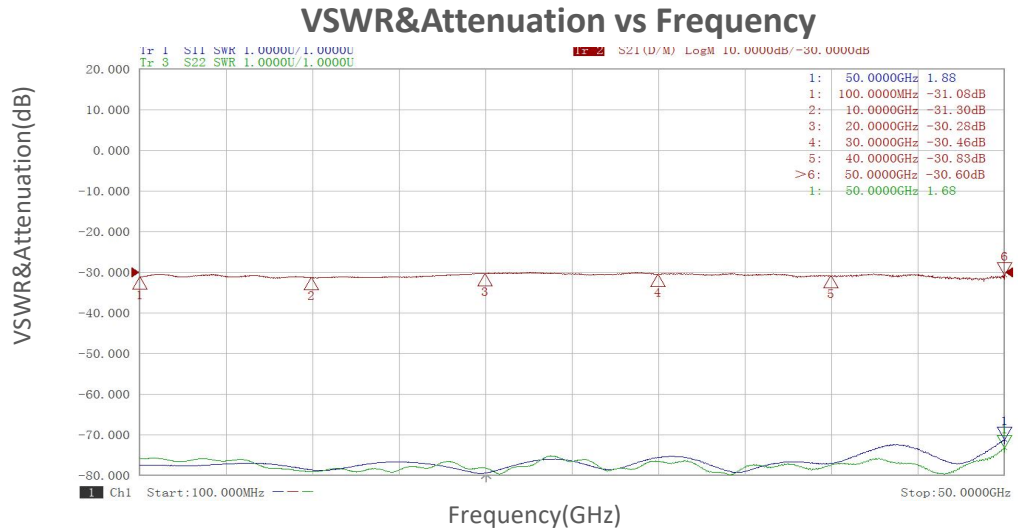
VSWR&Attenuation vs Frequency



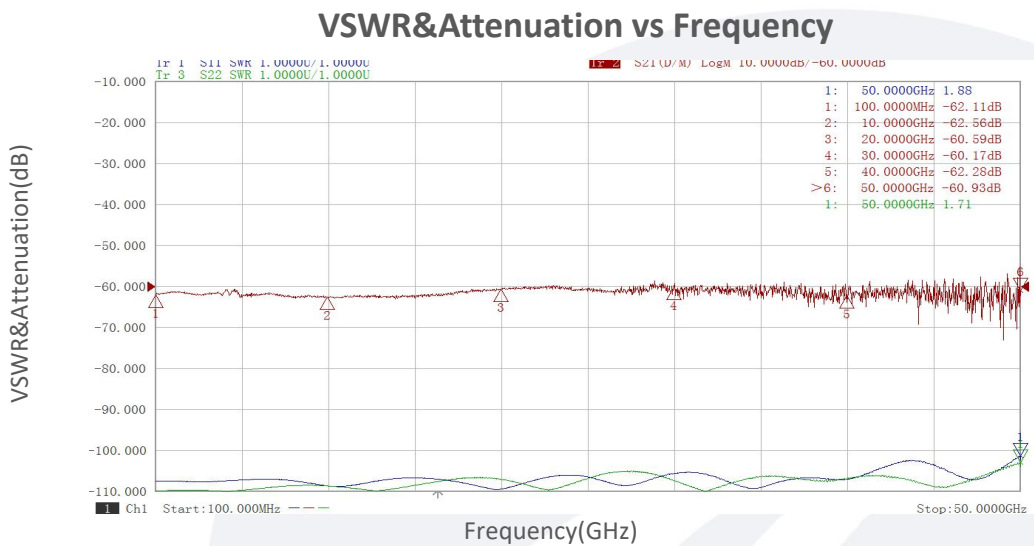
Note: Above data is for ref only, actual data may vary from unit to unit depending on operating environment and other factors like material lots etc.

Typical Performance Data:

31dB:



62dB:



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