

Model:TLDA1G40G-62-6

Digital Attenuator

1-40 GHz, 6-Bit, 1 dB LSB, 62 dB Range

Feature:

- Ultra Wide Band: 1-40GHz
- 6-Bit, 1 dB LSB, 62 dB Range
- Low Insertion Loss
- High Attenuator Accuracy

Electrical Specifications:

Parameter	Min	Typ	Max	Units
Frequency range	1-40			GHz
Insertion Loss			13	dB
Attenuation Range			62	dB
Attenuation Flatness			±2.5	dB
Control Bit TTL	6			Bit
Least Significant Bit	1			dB
Switch Speed			500	ns
Input VSWR			2.5	:1
Output VSWR			2.5	:1
Input Max Power	23			dBm
DC Voltage		5		V DC
DC Supply Current		40		mA
Impedance	50			Ohms

Mechanical Specifications:

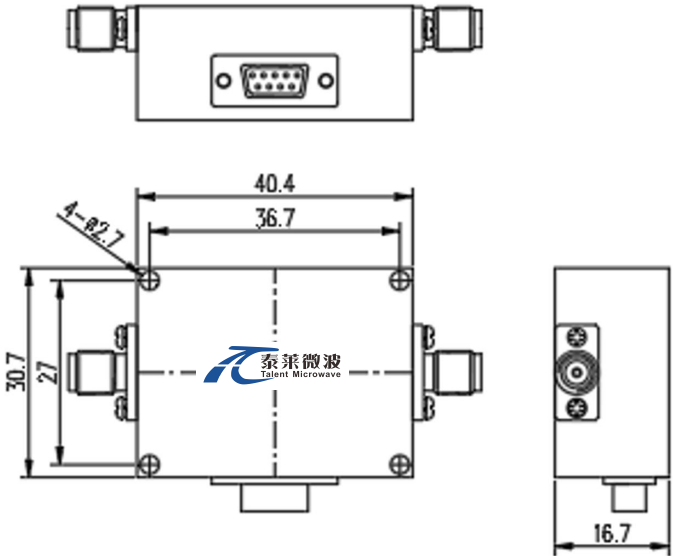
Parameter	Value	Units
Input /Output Connector	2.92mm Female/2.92mm Female	
DC Connector	MICRO-D9 Female	
Size	40.4*30.7*16.7	mm
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+5V (±5%)
RF Input Power	23 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: mm



Truth Table						
TTL Control Input						Attenuation
Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	
0	0	0	0	0	0	Reference
0	0	0	0	0	1	1dB
0	0	0	0	1	0	2dB
0	0	0	1	0	0	4dB
0	0	1	0	0	0	8dB
0	1	0	0	0	0	16dB
1	0	0	0	0	0	31dB
1	1	1	1	1	1	62dB

MICRO-D9	
Pin#	Function
1	+5 V
2	GND
3~8	Bit1~Bit6
9	NC

Environmental Conditions:

Parameter	Min	Typ	Max	Units
Operating Temperature	-45		+85	°C
Non-operating Temperature	-55		+125	°C
Relative humidity		95		%
Altitude	10,000			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
TLDA1G40G-62-6	6-Bit Digital Digital Attenuator,1-40GHz,2.92mm Female	Rev.1.1