

Model: TLDA4G12G-32-6
Digital Attenuator
4-12 GHz, 6-Bit, 0.5 dB LSB, 31.5 dB Range
Feature:

- Ultra Wide Band: 4-12 GHz
- 6-Bit, 0.5 dB LSB, 31.5 dB Range
- Low Insertion Loss
- High Attenuator Accuracy

电气特性 Electrical:

参数Parameter	Min.	Typ.	Max.	单位Units
频率范围 Frequency range	4-12			GHz
插损 Insertion Loss			6.0	dB
衰减范围 Attenuation Range		31.5		dB
控制位数 Control Bit TTL		6		Bit
衰减步进 Attenuation Step		0.5		dB
输入驻波 Input VSWR		1.5	2.0	:1
输出驻波 Output VSWR		1.5	2.0	:1
最大输入功率 Input Max Power			23	dBm
TTL逻辑 Control Logic TTL	"0"=Low ; "1"=High (+3.3V~+5V)			
直流电压 DC Voltage		+5		V DC
直流电流 DC Supply Current		20		mA
阻抗 Impedance	50			Ohms

机械特性 Mechanical :

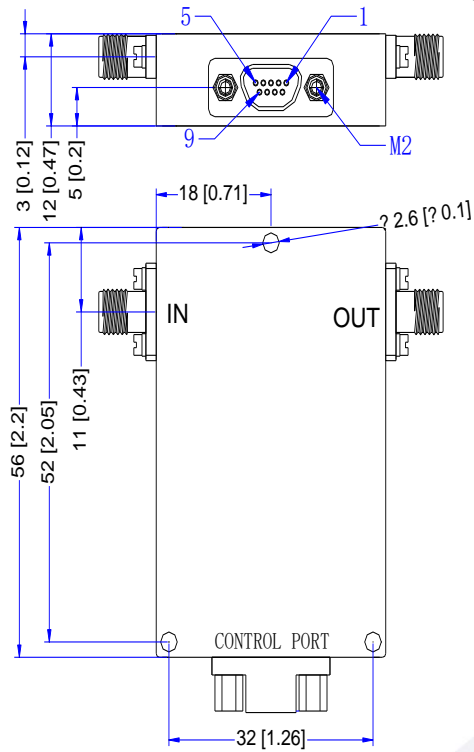
参数Parameter	指标 Value	单位Units
输入输出接口 Input /Output Connector	SMA Female	
控制连接器 Control Connector	MICRO-D9 Female	
尺寸 Size	56*36*12	mm
重量 Weight	TBD	g

绝对最大值 Absolute Maximum Ratings:

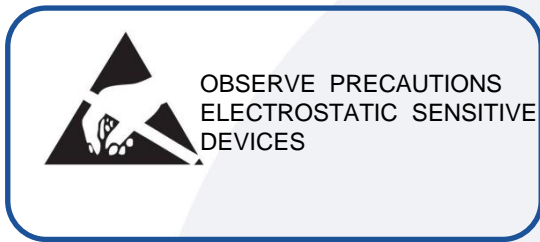
参数Parameter	指标 Value
供电偏置电压 Supply Bias Voltage	5 V±10%
输入功率 RF Input Power	25 dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V

外形尺寸 Outline Drawing:

Unit: mm(Inches)



MICRO-D9 Female Define	
引脚 Pin #	功能 Function
1	+5V
2	NC
3	GND
4-9	C1-C6



真值表 Truth Table

C6	C5	C4	C3	C2	C1	衰减 Attenuation
1	1	1	1	1	1	Reference IL
1	1	1	1	1	0	0.5dB
1	1	1	1	0	1	1dB
1	1	1	0	1	1	2dB
1	1	0	1	1	1	4dB
1	0	1	1	1	1	8dB
0	1	1	1	1	1	16dB
0	0	0	0	0	0	31.5dB

温度环境 Environmental Conditions:

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 11msc 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
TLDA4G12G-32-6	Digital Attenuator 4-12 GHz, 6-Bit, 0.5 dB LSB, 31.5 dB Range	Rev.1.1