

Voltage Controlled Attenuator

0.1-12GHz/64dB Attenuation Range

Model: TLVA0.1G12G-64-10

The TLVA0.1G12G-64-10 is an broadband voltage controlled electrical attenuator operating from 0.1 to 12 GHz. The attenuator exhibits 7 dB typical insertion loss and 0 to 64 dB nominal attenuation range across the frequency range of 0.1 to 12 GHz while applying 0 to +10 V DC control voltage. The RF input and output ports are female SMA coax connectors.

Features:

- Frequency range: 0.1-12GHz
- Attenuation Range: 64dB Typ
- Insertion Loss: 7dB Typ
- High Attenuator Accuracy

Applications:

- Radar Systems
- Communication Systems
- Testing Equipment

电气特性 Electrical Characteristics:

参数 Parameter	Min	Typ	Max	单位 Units
频率范围 Frequency range	0.1		12	GHz
插损 Insertion Loss		7		dB
衰减范围 Attenuation Range	0		64	dB
输入驻波 Input VSWR		2.5		:1
输出驻波 Output VSWR		2.5		:1
最大输入功率 Input Max Power			15	dBm
控制电压 Control Voltage*	0	10		V DC
直流电压 DC Voltage		12		V DC
直流电流 DC Supply Current		30		mA
阻抗 Impedance	50			Ohms

*Negative slope: "0" is the initial without attenuation;
The control voltage range is customizable.

机械特性 Mechanical Specifications:

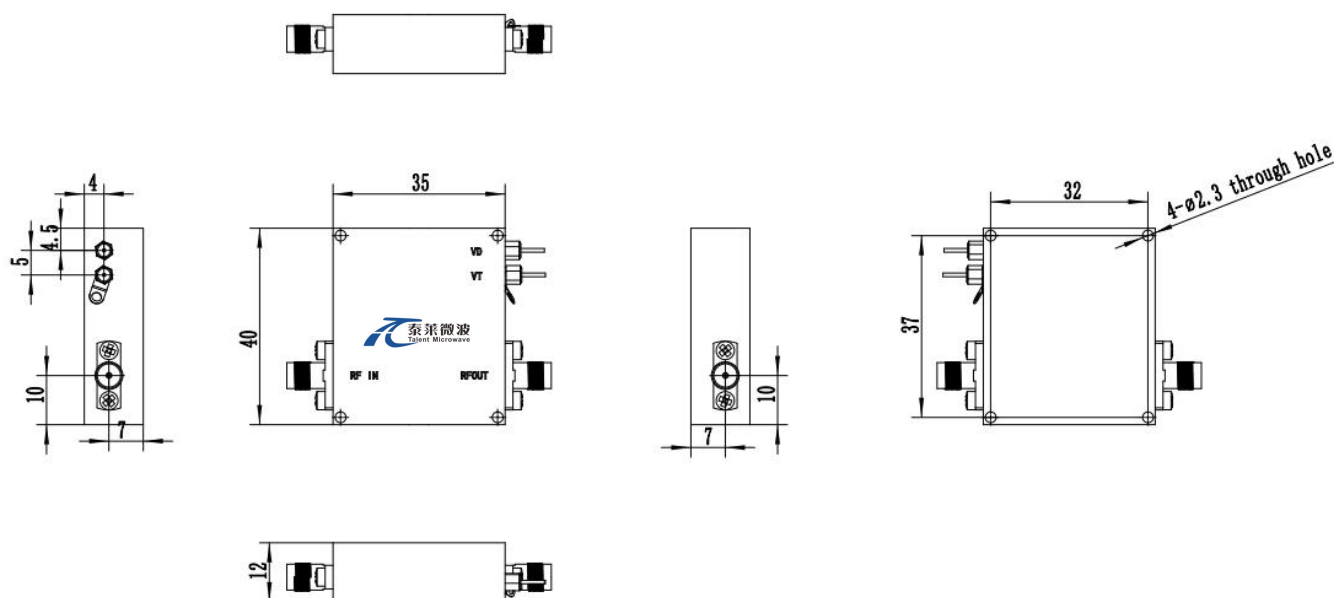
描述 Description	参数 Parameter	单位 Units
输入/输出接口 Input /Output Connector	SMA Female/SMA Female	
控制连接器 Control Connector	Pin	
尺寸 Size	35*40*12	mm

绝对最大值 Absolute Maximum Ratings :

描述 Description	参数 Parameter	单位 Units
供电偏置电压 Supply Bias Voltage	+15	VDC
射频输入功率 RF Input Power	+15	dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V	

外形图 Outline Drawing:

Unit:mm; Tolerance:±0.1mm



ESD Protection: Strictly adhere to ESD precautions to prevent electrostatic damage.

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	10,000			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 Base Number	描述 Description	版本号 Revision
TLVA0.1G12G-64-10	Voltage Controlled Attenuator 0.1-12GHz, 64dB Range, SMA Female	Rev.1.0