

TURDADC26.5G-114

The TURDADC26.5G-114 is an broadband Program controlled electrical attenuator operating from DC to 26.5 GHz. The attenuator exhibits 3.5 dB maximum insertion loss and offers 11 dB nominal attenuation control range in 1 dB steps under a 4 steps digital control. The RF input and output ports are female 2.92 mm coax connectors.

Features:

- Ultra Wide Band: DC-26.5GHz
- 4 steps,1 dB LSB, 11 dB Range
- Low Insertion Loss
- 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	DC-26.5			GHz
插损 Insertion Loss			3.5	dB
衰减范围 Attenuation Range	11			dB
控制位数 Control Step	4			Bit
衰减步进 Attenuation Step	1			dB
衰减精度 Attenuation Accuracy	±0.8dB (1dB,2dB,4dB); ±1.6 dB (11dB)			dB
重复性 Repeatability		0.05		dB
驻波 Input VSWR			2.0	:1
最大输入功率 Input Max Power			30	dBm
寿命 Operating Life(Per Switch)	1000000			cycles
直流电压 DC Voltage	20	24	28	V DC
直流电流 DC Supply Current		126		mA
阻抗 Impedance	50			Ohms

机械特性 Mechanical Specifications:

描述 Description	参数 Parameter	单位 Units
输入/输出接口 Input /Output Connector	2.92mm Female/2.92mm Female	
控制连接器 Control Connector	517.076.003.010	
尺寸 Size	108.3*40.8*22	mm
重量 Weight	≤350	g

绝对最大值 Absolute Maximum Ratings :

描述 Description	参数 Parameter	单位 Units
射频输入功率 RF Input Power	30	dBm
ESD灵敏度 ESD sensitivity (HBm)	Class 0, passed 150V	

外形图 Outline Drawing: Unit:mm



OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE

加电接口和真值表 Supply Conector and Truth Table(517.076.003.010):

517.076.003.010 Define	
引脚Pin#	功能Function
1	Step1 Straight-through
2	Step1 1dB attenuation
3	GND
4	Step2 Straight-through
5	Step3 Straight-through
6	Step4 Straight-through
7	Step4 4dB attenuation
8	Step3 2dB attenuation
9	Step2 4dB attenuation
10	+20~+28V DC

Control:At same step,if the voltage of this pin drops from TTL high level to low level (0V to +1.0Vdc) and the low level lasts for more than 20ms, while other pins (except pins 3 and 10) remain at TTL high level (+4.2V to +5Vdc), their respective functions will be implemented.

真值表 Truth Table				
Step1	Step2	Step3	Step4	衰减 Attenuation
O	O	O	O	0dB
x	O	O	O	1dB
O	O	x	O	2dB
x	O	x	O	3dB
O	x	O	O	4dB
x	x	O	O	5dB
O	x	x	O	6dB
x	x	x	O	7dB
O	x	O	x	8dB
x	x	O	x	9dB
O	x	x	x	10dB
x	x	x	x	11dB

Note:○ represents signal transmission through a straight-through patch, X represents signal transmission through an attenuating patch.
For example, to achieve a dB attenuation, the connector should be powered as follows:
Pin 1: TTL high level
Pin 2: TTL high level changes to low level and the low level lasts for more than 20ms
Pin 3: Ground
Pin 4: TTL high level
Pin 5: TTL high level changes to low level and the low level lasts for more than 20ms
Pin 6: TTL high level changes to low level and the low level lasts for more than 20ms
Pin 7: TTL high level
Pin 8: TTL high level
Pin 9: TTL high level changes to low level and the low level lasts for more than 20ms
Pin 10: +24Vdc

温度环境 Environmental Conditions:

参数 Parameter	Min	Typ	Max	单位 Units
操作温度 Operating Temperature	-55		+75	°C
存储温度 Non-operating Temperature	-55		+85	°C
相对湿度 Relative humidity		95		%
海拔 Altitude	10,000			feet
震动 Shock / Vibration(MIL-STD-810F)	5g 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
TURDADC26.5G-114	4-Steps Program Controlled Attenuator DC-26.5GHz,11 dB, 1 dB Step Size	Rev.1.1