

Model:TLDA0.1G40G-120-10

Digital Attenuator

0.1-40 GHz, 10-Bit, 0.25 dB LSB, 126.25 dB Range

Feature:

- Ultra Wide Band: 0.1-40GHz
- 10-Bit, 0.25 dB LSB, 126.25 dB Range
- Low Insertion Loss
- High Attenuator Accuracy

Electrical:

Parameter	Min.	Typ.	Max.	Units
Frequency range	0.1-40			GHz
Insertion Loss		30		dB
Attenuation Range	126.25			dB
Control Bit TTL	10			Bit
Attenuation Step	0.25			dB
Switch Speed			100	ns
Input VSWR		1.8		:1
Output VSWR		1.8		:1
Input Max Power	27			dBm
DC Voltage	+5			V DC
DC Supply Current			80	mA
Impedance	50			Ohms

Mechanical :

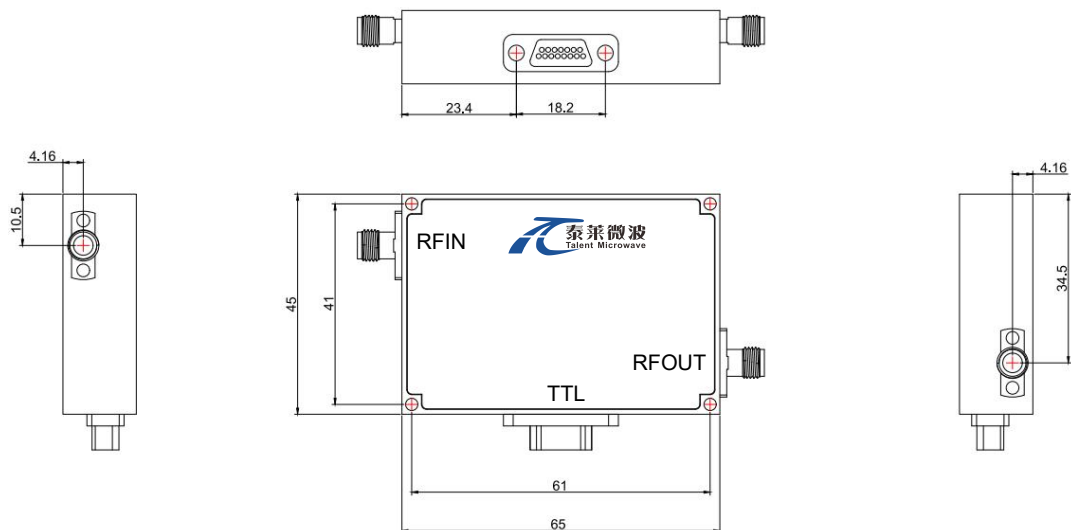
Parameter	Value	Units
Input /Output Connector	2.92 Female	
DC and control interface	J30J-15ZKP	
Size		mm
Weight	/	g

Absolute Maximum Ratings:

Parameter	Value
Supply Bias Voltage	+5V ($\pm 5\%$)
RF Input Power	27 dBm
ESD sensitivity (HBm)	Class 0, passed 150V

Outline Drawing:

Unit: mm



真值表 Truth Table

TTL Control Input										Signal Path State
V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	
0	0	0	0	0	0	0	0	0	0	0dB
1	0	0	0	0	0	0	0	0	0	0.25dB
0	1	0	0	0	0	0	0	0	0	0.5dB
0	0	1	0	0	0	0	0	0	0	1dB
0	0	0	1	0	0	0	0	0	0	2dB
0	0	0	0	1	0	0	0	0	0	4dB
0	0	0	0	0	1	0	0	0	0	8dB
0	0	0	0	0	0	1	0	0	0	16dB
0	0	0	0	0	0	0	1	0	0	31.5dB
0	0	0	0	0	0	0	1	1	0	63dB
0	0	0	0	0	0	0	1	1	1	94.5dB
1	1	1	1	1	1	1	1	1	1	126.25dB

注: 1: +5V

J30J-15ZKP			
引脚Pin#	功能 Function	引脚Pin#	功能 Function
1	V1	9	V9
2	V2	10	V10
3	V3	11	NC
4	V4	12	NC
5	V5	13	NC
6	V6	14	GND
7	V7	15	+5V
8	V8		

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
TLDA0.1G40G-120-10	10-Bit Digital Digital Attenuator,0.1-40GHz,2.92 Female	Rev.1.1