

MODEL HIDT5T14001

0.1-40GHz Digital Control Attenuator



■ Features

- Ultra Wide Band
- Low Insertion Loss
- High Attenuator Range
- High Attenuator Accuracy

■ Applications

- Radar Systems
- Communication Systems
- Receivers Systems

□ Electrical Specifications

Parameter	Min.	Typ.	Max	Units
Frequency Range	0.1-40			GHz
Insertion Loss		5	7	dB
Attenuation Range	31			dB
Input VSWR		1.5	2.5	
Output VSWR		1.5	2.5	
Switch Speed			100	ns
Attenuation Step	1			dB
Control Bit TTL	5			Bit
Attenuation Accuracy	1-7dB ± 0.5 dB; 7-11dB ± 1 dB; 11-31dB ± 1.5 dB;			dB
Attenuation Flatness	1-7dB ± 0.5 dB; 7-11dB ± 1.0 dB; 11-30dB ± 1.5 dB			dB
Input Max Power(no damage)			30	dBm
DC Power Supply	+5V@50mA,			mA
Impedance	50			Ω
Input Output Connector	2.92-K			
Material	Aluminium\Gold Painting			
Weight	50g			
Package Sealing	Epoxy Sealing (Standard) Hermetically Seal(Optional)			

Environmental Conditions

Operational Temperature	-45°C~+85°C	Vibration	25g rms (15 degree 2KHz) endurance, 1 hour per axis
Storage Temperature	-55°C~+125°C	Shock	20G for 11msc half sin wave, 3 axis both directions
Executive Standard	MIL-STD-810G	Humidity	100% RH at 35c, 95%RH at 40°C

Absolute Maximum Ratings

Supply Bias Voltage	± 10%V
RF INPUT POWER	30dBm
ESD sensitivity (HBm)	Class 0, passed 150V

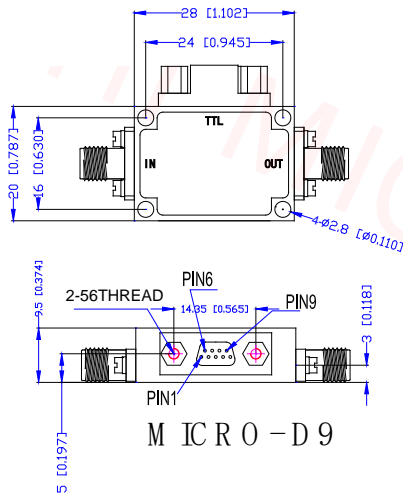


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DEVICES



Outline Drawing

All Dimensions in mm (inches) Tolerance ±0.25 (0.01)



Control Voltage Input					Attenuation state
C5	C4	C3	C2	C1	
0	0	0	0	0	Reference IL
0	0	0	0	1	1dB
0	0	0	1	0	2dB
0	0	1	0	0	4dB
0	1	0	0	0	8dB
1	0	0	0	0	16dB
1	1	1	1	1	31dB

MICRO-D9 Female Define

1	2	3	4	5	6	7	8	9
+5v	GND	-5v	C1	C2	C3	C4	C5	NC