

MODEL H1DT70809H25

8.5-9.5GHz Digital Control Attenuator



Note: The photo is for illustration purposes only. Please refer to outline drawing

■ 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	8.5-9.5			GHz
Insertion Loss		1.5	2.0	dB
Attenuation Range	31.5			dB
Input VSWR		1.5	2.0	
Output VSWR		1.5	2.0	
Switch Speed		1	2	us
Attenuation Step	0.25			dB
Control Bit TTL	7			Bit
Attenuation Accuracy	0-15dB \pm 0.3dB;16-31.5dB \pm 1dB			dB
Attenuation Flatness	0-15dB \pm 0.5dB;16-31.5dB \pm 1dB			dB
Input Max Power(no damage)			27	dBm
DC Power Supply	+12V@250mA,			mA
Impedance	50			Ω
Input Output Connector	SMA-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

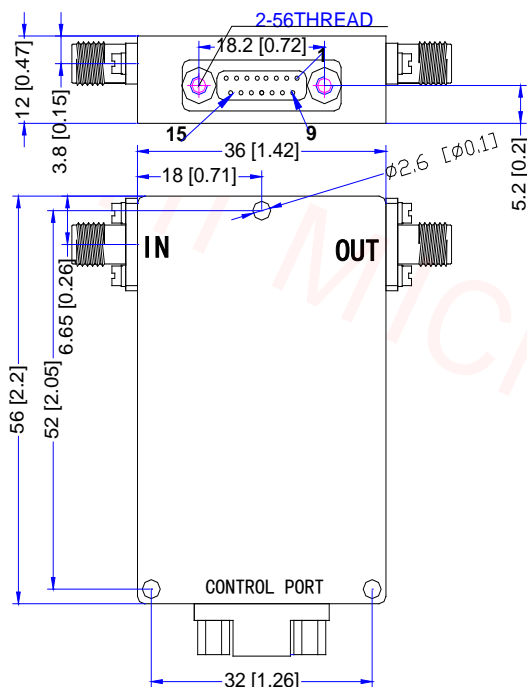
Supply Bias Voltage	± 10%V
RF INPUT POWER	27dBm
ESD sensitivity (HBm)	Class 0, passed 150V

OBSERVE PRECAUTIONS
ELECTROSTATIC SENSITIVE
DEVICES



Outline Drawing

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



Control Voltage Input							Attenuation state
C7	C6	C5	C4	C3	C2	C1	
0	0	0	0	0	0	0	Reference IL
0	0	0	0	0	0	1	0.25dB
0	0	0	0	0	1	0	0.5dB
0	0	0	0	1	0	0	1dB
0	0	0	1	0	0	0	2dB
0	0	1	0	0	0	0	4dB
0	1	0	0	0	0	0	8dB
1	0	0	0	0	0	0	16dB
1	1	1	1	1	1	1	31.5dB

MICRO-D9 Female Define

1	2	3	4	5	6	7	8	9
+12v	GND	C1	C2	C3	C4	C5	C6	C7