

# MODEL HIDENT20601

## 0.2-6GHz 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	0.2-6			GHz
Insertion Loss		4	5.5	dB
Attenuation Range	63			dB
Input VSWR		1.5	1.8	
Output VSWR		1.5	1.8	
Switch Speed			1	us
Attenuation Step	1			dB
Control Bit TTL	6			Bit
Attenuation Accuracy	1-7dB $\pm 0.5$ dB; 7-11dB $\pm 0.7$ dB; 11-30dB $\pm 1.0$ dB; 31-63 $\pm 1.5$ dB			dB
Attenuation Flatness	1-7dB $\pm 0.5$ dB; 7-11dB $\pm 1.0$ dB; 11-30dB $\pm 2.0$ dB; 31-63 $\pm 2.5$ dB			dB
Input Max Power(no damage)			20	dBm
DC Power Supply	+5V@50mA,			mA
Impedance	50			$\Omega$
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	20dBm
ESD sensitivity (HBm)	Class 0, passed 150V

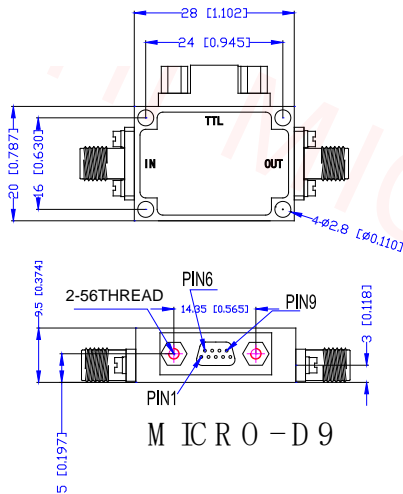


OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES



### Outline Drawing

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



Control Voltage Input						Attenuation state
C6	C5	C4	C3	C2	C1	
0	0	0	0	0	0	Reference IL
0	0	0	0	0	1	1dB
0	0	0	0	1	0	2dB
0	0	0	1	0	0	4dB
0	0	1	0	0	0	8dB
0	1	0	0	0	0	16dB
1	0	0	0	0	0	32dB
1	1	1	1	1	1	63dB

#### MICRO-D15 Female Define

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