

# MODEL HIDT3H14010

## 0.01-40GHz Broadband 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	Min.	Typ.	Max	Units
Frequency Range	0.01-18			18-40			GHz
Insertion Loss		5	7		9	13	dB
Attenuation Range	60						dB
Input VSWR		1.8	2.5		1.8	2.5	
Output VSWR		1.8	2.5		1.8	2.5	
Switch Speed	1						us
Attenuation Step	10						dB
Control Bit TTL	3						Bit
Attenuation Accuracy	10dB $\pm$ 1dB; 10-30dB $\pm$ 1.5dB; 30-60dB $\pm$ 2.5dB						dB
Attenuation Flatness	10dB $\pm$ 1dB; 10-30dB $\pm$ 1.5dB; 30-60dB $\pm$ 2.5dB						dB
Input Max Power(no damage)	23						dBm
DC Power Supply	+5V@150mA, -5V @65mA						mA
Impedance	50						$\Omega$
Input Output Connector	2.92						
Material	Aluminium\Gold Painting						
Weight	50g						
Package Sealing	Epoxy Sealing (Standard) Hermetically Seal(Option )						

### 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	23dBm
ESD sensitivity (HBm)	Class 0, passed 150V



OBSERVE PRECAUTIONS  
ELECTROSTATIC SENSITIVE  
DEVICES



### Outline Drawing

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

