

# MODEL HILNAT5181840

## 0.5-18GHz Broadband Amplifier



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

### ■ Features

- Ultra Wide Band: 0.5-18GHz
- Gain: 18dB
- Output Power: 20dBm
- High Output IP3: 30dBm

### ■ Applications

- Radar Systems
- Communication Systems
- Receivers Systems

### □ Electrical Specifications

Parameter	Min.	Typ.	Max	Units
Frequency Range	0.5-18			GHz
Gain	16	18	20	dB
Gain Flatness		± 1.0	± 1.5	dB
Input VSWR		1.5	2.0	-
Output VSWR		1.5	2.0	-
Output Power for 1 dB Compression (P1dB)	18	20		dBm
Noise Figure		4	5	dB
Output IP3		30		dBm
Input Max Power(no damage)			5	dBm
DC Current (Vcc=+12~15V)		150	170	mA
Impedance	50			Ω
Input Output Connector	SMA-k			
Material	Aluminium\Gold Painting			
Weight	80g			
Package Sealing	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

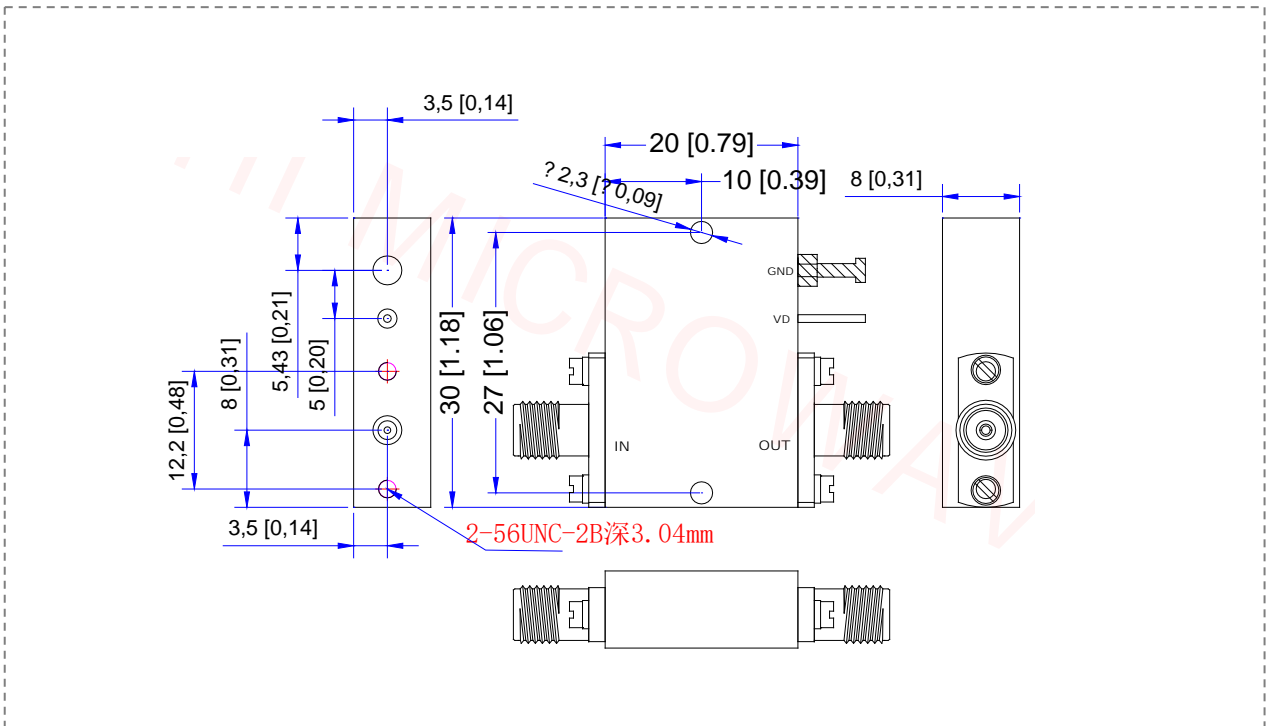
### ■ Absolute Maximum Ratings

Supply Bias Voltage	+18V
RF INPUT POWER	+5dBm
ESD sensitivity (HBm)	Class 0, passed 150V



### ■ Outline Drawing

All Dimensions in mm ( inches ) Tolerance  $\pm 0.25$  ( 0.01 )



**\*\*\*Heat Sink required during operation\*\*\***