

# MODEL HILNA06076008

## 6.89-7.75GHz Broadband Amplifier



### ■ Features

- Ultra Broadband: 6.89~7.75GHz
- Low Noise Figure: 0.8dB
- High Gain: 48dB
- P1dB Output Power: 14dBm
- High OIP3: 20dBm
- Supply Voltage : +12V@ 150mA

### ■ Applications

- Radar Systems
- Communication Systems
- Receiving Systems

### □ Electrical Specifications

Parameter	Min.	Typ.	Max.	Units
Frequency Range	6.89-7.75			GHz
Gain	60			dB
Gain Flatness		±0.5	±1	dB
Input VSWR		1.6	1.9	-
Output VSWR		1.3	1.5	-
Output Power for 1 dB Compression (P1dB)	13	15		dBm
Noise Figure		0.8	1.0	dB
OIP3		20		dBm
Spurious		-60		dBc
Input Max Power(no damage)			0	dBm
DC Current (Vcc=+12V)		150	180	mA
Weight	50			g
Impedance	50			Ω
Input Connector	SMA-K(Removable)			
Output Connector	SMA-K(Removable)			
Material	Aluminum Gold Plating			
DC Power	SMA-K			

### 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

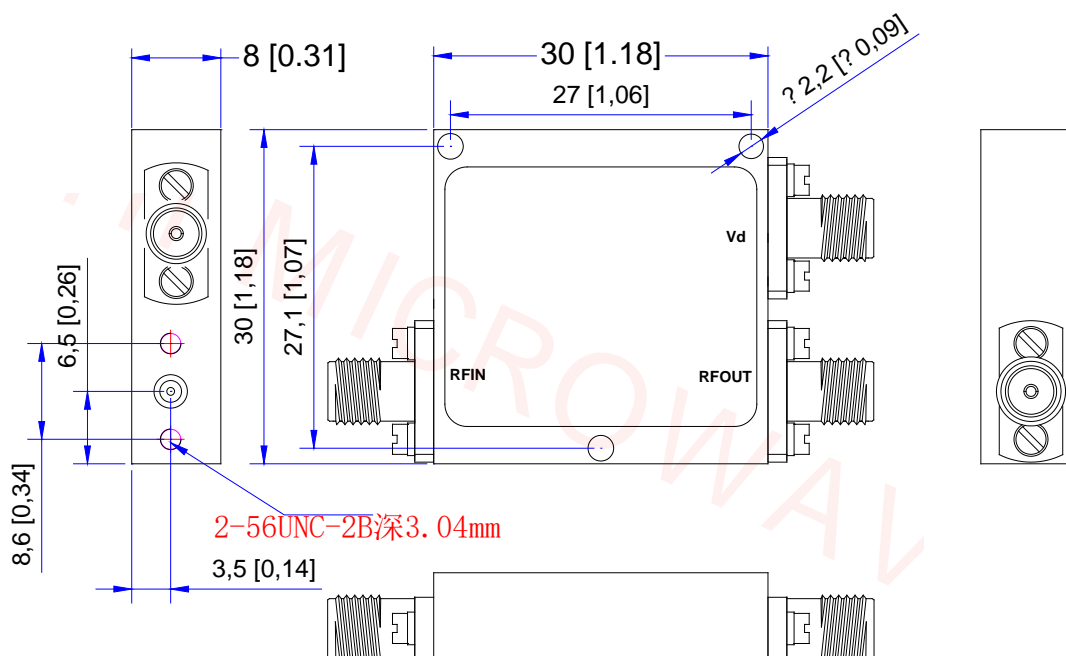
### Absolute Maximum Ratings

Supply Bias Voltage	+12V
RF INPUT POWER	0dBm
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\*\*\***