

MODEL HILNAT5201060

0.5-20GHz Broadband Amplifier



■ Features

- Ultra Broadband: 0.5~20GHz
- High Gain: 15dB
- P1dB Output Power: 20dBm
- High OIP3: 28dBm
- Supply Voltage : +12V@ 120mA

■ Applications

- Radar Systems
- Communication Systems
- Receiving Systems

□ Electrical Specifications

Parameter	Min.	Typ.	Max.	Units
Frequency Range	0.5-20			GHz
Gain	10	14		dB
Gain Flatness		±1.5	±2	dB
Input VSWR		1.6	2.0	-
Output VSWR		1.5	1.8	-
Output Power for 1 dB Compression (P1dB)	20	21		dBm
Noise Figure		6		dB
OIP3		28		dBm
Suprious		-60		dBc
Input Max Power(no damage)			20	dBm
DC Current (Vcc=+12V)		120	150	mA
Weight	50			g
Impedance	50			Ω
Input Connector	SMA-K(Removable)			
Output Connector	SMA-K(Removable)			
Material	Aluminum Gold Plating			
Package Sealing	General 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

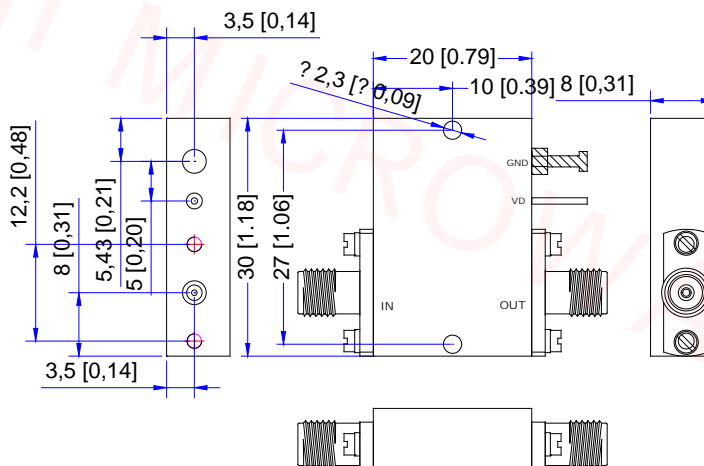
Absolute Maximum Ratings

Supply Bias Voltage	+14V
RF INPUT POWER	20dBm
ESD sensitivity (HBm)	Class 0, passed 150V



Outline Drawing

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



Heat Sink required during operation