



# Ultra Wide Band AC- Low Noise Amplifier 0.01GHz~40GHz

## Features

- High Output Power 20dBm Typical.
- High peak to average handling capability.
- High linearity and low noise figure.
- Convenient AC Power Input. (AC 110V/220V)
- Integrated Heat Sink and Fan.

## Typical Applications

- Wireless Infrastructure
- 5G communication
- Test and measurement Instrument

RF Microwave & VSAT  
Fiber Optics

Parameters	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	0.01		18	18		40	GHz
Gain	27	29		26	28		dB
Gain Flatness		±1.5			±1.5		dB
Gain Variation Over Temperature (-40°C~+85°C)		±1.0			±1.0		dB
Noise Figure		4.0			6.0		dB
Input VSWR		1.8			2.0		dB
Output VSWR		1.8			2.0		dB
Output Power for 1 dB Compression (P1dB)	18	21		16	19		dBm
Saturated Output Power (Psat)		23			21		dBm
Output Third Order Intercept (OIP3)		31			29		dBm
Isolation S12		50			45		dB
Supply Current (Idd) (AC=110-220V)		300	400		300	400	mA
Input Max Power(no damage)			-3			-3	dBm

Weight	- ounces	Impedance	50ohms
Input / Output Connectors	2.92mm-Female	Material	Aluminum/copper
Finish	Gray Painted		



### Absolute Maximum Ratings

Operating Voltage	AC110~220V
RF Input Power(RFIN)	+0dBm

### Environmental Specifications

Operational Temperature	-40°C~+85°C
Storage Temperature	-50°C~+105°C
Altitude	30,000 ft. (Epoxy Sealed Controlled environment)
	60,000 ft. 1.0psi min (Hermetically Sealed Un-controlled environment) (Optional)
Vibration	25g RMS (15 degrees 2KHz) endurance, 1 hour per axis
Humidity	100% RH at 35°C, 95%RH at 40°C
Shock	20G for 11msec half sine wave, 3 axis both directions

### Biassing Up Procedure

Step 1	Connect input and output with 50 Ohm source and load with in band return loss better than 10dB.
Step 2	Connect AC Plug
Step 3	Flip switch to "ON" position

### Power OFF Procedure

Step 1	Flip switch to "OFF" position
Step 2	Remove AC Plug
Step 3	Remove RF Connection

### Outline Drawing:

All Dimensions in mm (inches)

