

Features

- Gain: 37dB Typical
- Noise Figure: 2.8dB Typical
- P1dB Output Power: +12dBm Typical
- Supply Voltage: +12V @ 120mA
- 50 Ohm Matched Input / Output
- RF Input Power Detection
- Size: 1.18" x 1.58" x 0.47"


Typical Applications

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

RF Microwave & VSAT
Fiber Optics

Parameter	Min.	Typ.	Max.	Units
Frequency Range	27		40	GHz
Gain	30	37		dB
Gain Flatness		±2.0	±3.0	dB
Gain Variation Over Temperature(-40°C~+85°C)		±1.0		dB
Noise Figure		2.8	3.5	dB
Input VSWR		2.0	2.5	: 1
Output VSWR		1.6	2.0	: 1
Output Power for 1 dB Compression (P1dB)	8.5	11.5		dBm
Saturated Output Power (Psat)		13.5		dBm
Output Third Order Intercept (OIP3)		22		dBm
Isolation S12		-50		dB
Supply Current (Idd) (Vcc=+12V)		120	150	mA
Detector output (RF Input>-40dBm@35GHz)		+3.3		V
Detector output (RF Input<-42dBm@35GHz)		0		V
Analog Voltage Output(RF Input>-40dBm@35GHz)		0.2		V

Weight	3.5 (Typ.)ounces	Impedance	50ohms
Input / Output Connectors	2.92mm-Female	Material	Aluminum
Finish	Gold Plated	Package Sealing	Epoxy Sealed (Standard)
			Hermetically Sealed (Option with extra charge)

QOTANA TECHNOLOGIES

Wide Band Low Noise Amplifier 27GHz~40GHz

Absolute Maximum Ratings

Operating Voltage	+15V
RF Input Power (RFIN)	+10dBm

Biassing Up Procedure

Step 1	Connect Ground Pin
Step 2	Connect input and output
Step 3	Connect +12V biasing

Power OFF Procedure

Step 1	Turn off +12V biasing
Step 2	Remove RF connection
Step 3	Remove Ground

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

Outline Drawing:

All Dimensions in mm (inches)

Heat Sink required during operation(Sold Separately)

