

Features

- Gain: 50dB Typical
- Saturated Output Power : 43dBm Typical
- Supply Voltage: +24V @ 8A
- 50 Ohm Matched Input / Output



Typical Applications

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

RF Microwave & VSAT
Fiber Optics

Parameter	Min.	Typ.	Max.	Min.	Typ.	Max.	Units
Frequency Range	27		29	29		34	GHz
Gain	60	65		38	50		dB
Gain Flatness		±3.0			±5.0		dB
Gain Variation Over Temperature (-45 °C~ +85 °C)		±3.0			±3.0		dB
Input Return Loss		10			10		dB
Output Power For 1dB Compression		39			39		dBm
Saturated Output Power (Psat)		43			42		dBm
Supply Current (I _{dd}) (V _{cc} =+24V)		3	8		3	8	A
Isolation S12	65	70		60	65		dB
Input Max Power(no damage)			-15			-15	dBm

Weight	/ounces	Impedance	50ohms
Input / Output Connectors	2.92 mm - Female	Material	Aluminum
Finish	Nickel plated	Package Sealing	Epoxy Sealing (Standard)
			Hermetically Seal (Option with extra charge)

QOTANA TECHNOLOGIES

Wide Band Power Amplifier 27GHz~34GHz

Absolute Maximum Ratings

Operating Voltage	+28Vdc
RF Input Power (RFIN)	-15dBm

Note: Maximum RF input power is set to assure safety of amplifier. Input power may be increased at own risk to achieve full power of amplifier. Please reference gain and power curves

Biassing Up Procedure

Step 1	Connect input and output with 50 Ohm source/load. (in band VSWR<1.9:1 or >10dB return loss)
Step 2	Connect Ground Pin
Step 3	Connect +24 VDC Biassing

Power OFF Procedure

Step 1	Turn Off +24 VDC Biassing
Step 2	Remove RF connection
Step 3	Remove Ground

Environmental Specifications

Operational Temperature	-40°C~+85°C(Case Temperature must be less than 85°C all time)
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)

