

Q-Band LNA (with Isolator)

Description

Our new Q-Band low noise amplifier (LNA) from Orbital Research provides bandwidth of 5.0 GHz for commercial and military SATCOM applications.

Designed primarily for satellite teleports and gateways, telemetry, tracking and command applications (TT&C), and airborne terminals, this wideband amplifier offers exceptional performance and data throughput.

Features

- High gain
- Low noise figure < 2.5 dB for excellent signal to noise ratios
- Superb gain flatness
- Excellent VSWR performance
- Ultra wideband frequency

Applications

The Orbital Q-Band LNA can be used for both military and commercial satellite communication applications, including large earth stations, LEO and SATCOM-on-the-Move (SOTM) applications.

ISO 9001:2015-certified QMS

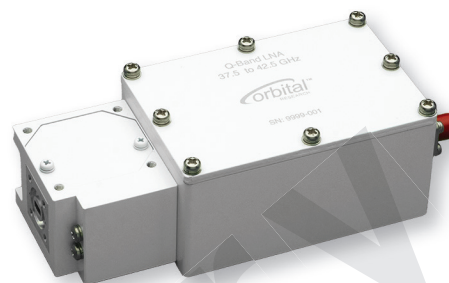
Specifications

FREQUENCY RANGE

RF Frequency Band (GHz)	37.5 to 42.5 GHz
Bandwidth MHz	5000
Noise Figure	2.3 @ 23C

VSWR

Input	2.0:1
Output	2.0:1 typical



GAIN

Gain (dB)	40
Flatness	+/- 2dB over whole band
Ripple	+/- 2.5 dB over 1 GHz
Stability	+/- 2.0 dB over temperature

OTHER SPECS

Image Rejection	> 40 dBc max
1 dB Compression	+5 dB min
OIP3	+15 dBm min
Overdrive Power Level (Non-Damaging)	-20 dBm

ENVIRONMENTAL

Operating Temp	-40°C to +60°C
Non-Operating Temp Range	-40C to +80C
Humidity	100% condensing
MTBF	> 125,000 hours
Standards	MIL-STD-810F for vibration, IP67, RoHS and REACH

POWER

Current Draw	85 mA at 12 VDC
Input Voltage Range	+12 to +24 VDC

MECHANICAL

Weight (grams)	400
Length (mm)	145
Width (mm)	70
Depth (mm)	40
Input Connector	WR-22
Output Connector	WR-22