



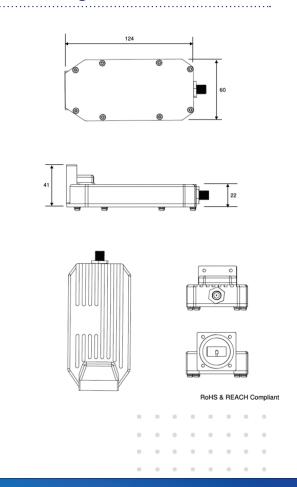
Orbital LNB Ku-Band 5300 Phase Locked Loop

Description

The Orbital 5300 Ku-Band Phase Locked Loop (PLL) LNB is built for applications that require high performance but not the ultra-low phase noise provided by an external 10 MHz reference. This economical, off-the-shelf LNB offers 60 dB gain, 500 to 750 MHz bandwidth, and frequency ranges from 10.95 GHz to 12.75 GHz. It's perfect for applications with less demanding phase noise requirements – such as consumer video, broadband, or DVB-S2 and DVB-S2X waveforms.



Mechanical Diagram



v.230907





Orbital LNB Ku-Band 5300 Phase Locked Loop

Specifications

FREQUENCY RANGE	
RF Frequency Band (GHz)	10.95 to 12.75
IF Frequency Band (MHz)	950 to 1700
Bandwidth (MHz)	500 or 750
Local Oscillator Frequency (GHz)	10.00, 10.75, 11.30
Noise Figure (dB)	0.8 max (+25 deg C)
LO Stability (ppm)	+/- 2.3 over temp
LO Phase Noise	-80 dBc @ 1 kHz
VSWR	
Input	2.5:1 typical
Output	2.3:1 max
GAIN	
Gain	60 nominal
Flatness	+/- 1.5 dB over the band
Ripple	+/- 1.0 dB over any 36 MHz
Stability	+/- 2 dB over temp & freq
OTHER SPECS	
1 dB Compressions (dBm)	+10
OIP3 (dBm)	+20
MTBF (> Hrs)	> 175,000 hours
Standards	RoHS and REACH
ENVIRONMENTAL	
Operating Temperature (deg C)	-40 to +60
Humidity (%)	100% condensing
POWER	
DC Input Voltage Range (Volts)	+12 to +24
DC Current Draw (mAmps)	200
MECHANICAL	
Weight (grams)	<350
Dimensions (mm)	125 x 60 x 41
Input Connector	WR-75
Output Connector	F, N
CUSTOM OPTIONS	
Customized Gain	40 and 50 dB
Customized LO Frequencies	Yes

Specifications are subject to change without notice.