

C-BAND EXTERNAL REFERENCE PLL LNB

MODEL PLV804ER

ELECTRICAL SPECIFICATIONS

Rev.A

No	Item	Specification	Remarks
-1	RF Input Frequency	3.4 to 4.2 GHz	
-2	IF Output Frequency	950 to 1750 MHz	
-3	Local Frequency	5.15 GHz	
-4	Local Frequency Stability	Phase locked to external reference.	
-5	Requirement for External Reference	Supplied through the center conductor of IF cable. [Frequency] 10MHz (sine wave) [Input Level] 0 to -10dBm @75 ohms at IF output [Phase Noise] -134dBc/Hz max. @100Hz -144dBc/Hz max. @1KHz -154dBc/Hz max. @10KHz -154dBc/Hz max. @100KHz	
-6	Local Phase Noise	-63dBc/Hz max. @100Hz -73 dBc/Hz max. @1kHz -83 dBc/Hz max. @10kHz -93 dBc/Hz max. @100kHz -103 dBc/Hz max. @1MHz	
-7	Local Oscillator Leakage	-45 dBm max. @ Waveguide input.	
-8	Noise Temperature	40K max. @+25°C	
-9	Gain	55 to 70 dB @ Over Tem. & Freq.	
-10	Gain Ripple	1dBp-p max per 36 MHz segment across the operating frequency band @+25°C	
-11	Input VSWR	3.0:1 max.	
-12	Output VSWR	2.0:1max. @ 75 Ω	
-13	Image Rejection	45 dB min.	
-14	1 dB Gain Compression Point	+3 dBm min.	
-15	Spurious in Rx Band	-124dBm max. @Waveguide input excluding Rx out±1MHz. Measure at RF Input power -85dBm	
-16	RF Input Stability	Conditionally stable (No oscillation) Source input VSWR < 3.0:1 at any phase angle.	
-17	Input Voltage	+15 to +24 V @ Supplied through center conductor of the IF cable.	
-18	Current	450 mA max.	
-19	Intercept Point	+10 dBm min.	
-20	IF Output Stability	No oscillation when IF output is shorten at any phase angle or it's electrical equivalent conditions of termination.	

MECHANICAL SPECIFICATIONS

No	Item	Specification	Remarks
-1	Input Interface	CPR229G, W/Gasket Groove, Waterproof (Mated with matching flange and O-ring)	
-2	Output Interface	F-Type, 75 Ω, female, Waterproof Fit center conductor 0.028 to 0.045 "dia.	
-3	Size	180(L) mm x 100(W) mm x 70(H) mm	
-4	Weight	approx. 700 g	
-5	Paint/Color	White: Munsell N9.5 semi-gloss	
-6	Label	SPC Label	

ENVIRONMENTAL SPECIFICATIONS

The unit will be sealed and will meet the best commercial environmental specifications for exposure to precipitation, water, sand, salt, dust and sun, etc.

No	Item	Specification	Remarks
-1	Operating Temperature	-40°C to +60°C	
-2	Storage Temperature	-40°C to +70°C	
-3	Thermal Gradient	-40°C/Hour	
-4	Relative Humidity	Up to 100%, condensation and frost	
-5	Altitude	Up to 10,000 feet @Operating	