

## 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 $\Omega$ , 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	