

## C-Band PLL LNB

Model PLV804FB

### ELECTRICAL SPECIFICATIONS

No	Item	Specification												
-1	RF Input Frequency	3.4 to 4.2 GHz												
-2	IF Output Frequency	950 to 1750 MHz												
-3	Local Frequency	5150 MHz nominal												
-4	Local Frequency Initial Offset	±2ppm max. @+25°C												
-5	Local Frequency Stability	±5ppm. max. @-30°C to +50°C, +25°C Reference												
-6	Local Oscillator Leakage	-45 dBm max. @ Waveguide input.												
-7	Local Phase Noise:	<table border="0"> <tr> <td>Offset Frequency</td> <td>Phase Noise</td> </tr> <tr> <td>100 Hz</td> <td>-60 dBc/Hz max.</td> </tr> <tr> <td>1 kHz</td> <td>-70 dBc/Hz max.</td> </tr> <tr> <td>10 kHz</td> <td>-80 dBc/Hz max.</td> </tr> <tr> <td>100 kHz</td> <td>-90 dBc/Hz max.</td> </tr> <tr> <td>1 MHz</td> <td>-100 dBc/Hz max.</td> </tr> </table>	Offset Frequency	Phase Noise	100 Hz	-60 dBc/Hz max.	1 kHz	-70 dBc/Hz max.	10 kHz	-80 dBc/Hz max.	100 kHz	-90 dBc/Hz max.	1 MHz	-100 dBc/Hz max.
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-8	Noise Temperature	50K max. @+25°C												
-9	Gain	55 to 70 dB Over Frequency & Temperature												
-10	Gain Ripple	1 dB p-p max per 27 MHz segment across the operating frequency band @+25°C												
-11	Input VSWR	2.5: 1 Typical												
-12	Output VSWR	2.5:1 max. @ 75 Ohms												
-13	Image Rejection	45 dB min.												
-14	1 dB Gain Compression Point	+0 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. (w/o isolator)												
-17	Input Voltage	+15 to +24 V @ Supplied through center conductor of the IF cable.												
-18	Current	500 mA max.												

### MECHANICAL SPECIFICATIONS

No	Item	Specification
-1	Input Interface	CPR-229G, W/Gasket Groove, Waterproof (mated with matching flange and gasket).
-2	Output Interface	F-Type, 75Ω, female, Waterproof
-3	Size	180(L) mm x 100(W) mm x 70(H) mm max.
-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
-1	Operating Temperature	-30°C to +50°C
-2	Storage Temperature	-40°C to +60°C
-3	Thermal Gradient	-40°C/Hour
-4	Relative Humidity	Up to 100%, condensation and frost
-5	Altitude	Up to 10,000 feet @ Operating

