

Ku-Band PLL LNB

Model PLV813

ELECTRICAL SPECIFICATIONS

2005/7

No	Item	Specification			Remarks
		(USA) PLV813A	(AUS) PLV813B	(ECS) PLV813C	
-1	RF Input Frequency	11.70 to 12.20 GHz	12.25 to 12.75 GHz	10.95 to 11.70 GHz	
-2	IF Output Frequency	950 to 1450 MHz		950 to 1700 MHz	
-3	Local Frequency	10.75 GHz	11.30 GHz	10.00 GHz	
-4	Local Frequency Initial Offset	±1ppm max. @+25°C. Measured at 1 minute after DC power on			
-5	Local Frequency Stability	±2.3ppm. max. @-40°C to +50°C, +25°C Reference			
-6	Local Oscillator Leakage	-45 dBm max. @ Waveguide input.			
-7	Local Phase Noise:	Offset Frequency	Phase Noise		
		100 Hz	-60dBc/Hz max.		
		1 kHz	-70 dBc/Hz max.		
		10 kHz	-75 dBc/Hz max.		
		100 kHz	-85 dBc/Hz max.		
		1 MHz	-100 dBc/Hz max.		
-8	Noise Figure	0.8dB 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 (w/o isolator)			
-12	Output VSWR	2.0:1 Typical @ 75Ω			
-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	350 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	WR-75, Waterproof - Mated with matching flange and O-ring	
-2	Output Interface	F-Type, 75Ω, female, Waterproof Fit center conductor 0.028 to 0.045 "dia.	
-3	Size	150(L) mm x 70(W) mm x 40(H) mm max.	
-4	Weight	Approx. 500 g (17.8 ounces)	
-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 +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	

