

KU-WIDEBAND LNB

2005/10/28

REV.A

ELECTRICAL SPECIFICATIONS

No	Item	Specification	Remarks								
-1	RF Input Frequency	10.95 to 12.75 GHz									
-2	IF Output Frequency	950 to 2750 MHz									
-3	Local Frequency	10.00 GHz									
-4	Local Frequency Initial Offset	±250 KHz max. @ +25°C. Measured at 10 minute after DC power on									
-5	Local Frequency Stability	±250 KHz max. @ -40°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>1 kHz</td> <td>-60 dBc/Hz max.</td> </tr> <tr> <td>10 kHz</td> <td>-80 dBc/Hz max.</td> </tr> <tr> <td>100 kHz</td> <td>-100 dBc/Hz max.</td> </tr> </table>	Offset Frequency	Phase Noise	1 kHz	-60 dBc/Hz max.	10 kHz	-80 dBc/Hz max.	100 kHz	-100 dBc/Hz max.	
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1 kHz	-60 dBc/Hz max.										
10 kHz	-80 dBc/Hz max.										
100 kHz	-100 dBc/Hz max.										
-8	Noise Figure	1.0dB Typical @ +25°C									
-9	Gain	50 to 65 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	3.0: 1 Typical									
-12	Output VSWR	2.5:1 Typical @ 75 Ω									
-13	Image Rejection	45 dB min.									
-14	1 dB Gain Compression Point	+5 dBm min.									
-15	Spurious in Rx Band	-120 dBm 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	200 mA max.									
-19	Intercept Point	+15 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, 75 Ω, 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	
-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	