

UNIVERSAL TWIN LNB

2 Fully Switched Output Universal LNB



TWH-031

1	Input Frequency Low Band High Band	10.7 - 11.7 GHz 11.7 - 12.75 GHz
2	Output Frequency Low Band High Band	950 - 2150 MHz 950 - 2150 MHz
3	Noise Figure TWF-031,TWH-031 TWH-051	0.3 dB typ 0.5 dB typ
4	Gain	50 - 60 dB
5	Gain Ripple 26 MHz bandwidth Low Band High Band	<+/-0.5 dB <5 dB typ <5 dB typ
6	Local Oscillator Frequency Low High	9.75 GHz 10.6 GHz
7	Local Oscillator Phase Noise (typ) 1kHz 10kHz 100kHz	-65 dBc/Hz -95 dBc/Hz -110 dBc/Hz
8	Local Oscillator stability (including Setting, aging and temperature drift	+/-1 MHz typ +/-3 MHz max
9	Current Consumption	port 1 only 170mA typ both ports 200mA typ
10	Image Rejection	>40 dB
11	Isolation Cross Polar Isolation High to Low Band Isolation	>30 dB >30 dB

TWF-031

12	Two Tone 3rd Order intercept point (output)	>15 dBm
13	Output Connector Impedance Return Loss	2x female F-Type 75 Ohm >10 dB
14	Operating Temperature Range Storage Temp Range	-40°C to +70°C -40°C to +70°C
15	Band Polarization Selection Signals applied to F-type connector Vertical Polarization Selection Horizontal Polarization Selection High Band Selection (22kHz tone) Frequency (square wave with controlled rise/fall transition time) Level Transition time Duty Cycle Load Impedance at 22kHz Low Band Selection	11.5V to 14V 15.5V to 19V 18 kHz to 26 kHz 0.4 Vpp to 0.8 Vpp 5μS to 15μs 40% to 60% >70 Ohm No tone
16	In Band Spurious (primarily 1700MHz)	<-65 dBm
17	Out of Band Spurious (primarily 850MHz)	<-45 dBm
18	Output Gain Difference (between the outputs in 26MHz Bandwidth)	<6 dB
19	TWF-031 Interface TWH-031,TWH-051	18.5mm Ø Waveguide, C120 Flange Off-set Parabola Matched, Frequency Compensated Feed Horn, 40mm Dish Clamp.

Patent Pending
January 2005