UNIVERSAL TWIN LNB

2 Fully Switched Output Universal LNB

TWH-031

1	**Input Frequency**	
	Low Band	10.7 - 11.7 GHz
	High Band	11.7 - 12.75 GHz
2	**Output Frequency**	
	Low Band	950 - 2150 MHz
	High Band	950 - 2150 MHz
3	**Noise Figure**	
	TWF-031,TWH-031	0.3 dB typ
4	**Gain**	50 - 60 dB
5	**Gain Ripple**	
	26 MHz bandwidth	<+/-0.5 dB
	Low Band	<5 dB typ
	High Band	<5 dB typ
6	**Local Oscillator Frequency**	
	Low	9.75 GHz
	High	10.6 GHz
7	**Local Oscillator Phase Noise (typ)**	
	1kHz	-65 dBc/Hz
	10kHz	-95 dBc/Hz
	100kHz	-110 dBc/Hz
8	**Local Oscillator stability**	
	(including Setting, aging and	+/-1 MHz typ
	temperature drift	+/-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	>30 dB
	High to Low Band Isolation	>30 dB

TWF-031

12	**Two Tone 3rd Order intercept point (output)**	>15 dBm
13		
	Output Connector	2x female F-Type
	Impedance	75 Ohm
	Return Loss	>10 dB
14	**Operating Temperature Range**	-40°C to +70°C
	Storage Temp Range	-40°C to +70°C
15	**Band Polarization Selection**	
	Signals applied to F-type connector	
	Vertical Polarization Selection	11.5V to 14V
	Horizontal Polarization Selection	15.5V to 19V
	High Band Selection (22kHz tone)	
	Frequency (square wave with controlled	
	rise/fall transition time)	18 kHz to 26 kHz
	Level	0.4 Vpp to 0.8 Vpp
	Transition time	5µS to 15µs
	Duty Cycle	40% to 60%
	Load Impedance at 22kHz	>70 Ohm
	Low Band Selection	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**	18.5mm ∅ Waveguide, C120 Flange
	TWH-031,TWH-051	Off-set Parabola Matched, Frequency Compensated Feed Horn, 40mm Dish Clamp.

Patent Pending
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