

# **2007XTBF**

# 2000 Triple-Band Ku-Band PLL LNB (0.7 dB)

Frequency: B: 10.95 - 11.70 GHz | 11.70 - 12.25 GHz |

12.25 - 12.75 GHz ty: External Referenc

**L.O. Stability:** External Reference **Output Connector:** F: 75 Ohm







#### **KEY SPECIFICATIONS**

Band	Ku-Band
Input Frequency Band 1	10.95 - 11.70 GHz
Input Frequency Band 2	11.70 - 12.25 GHz
Input Frequency Band 3	12.25 - 12.75 GHz
LO Frequency 1	10.00 GHz
LO Frequency 2	10.75 GHz
LO Frequency 3	11.30 GHz
LO Stability	Ext Ref
LO Type	PLL
Noise Figure Max	0.8 dB
Noise Figure Typ	0.7 dB
Number Of Onboard Los	Triple-Band
Output Frequency Band 1	950 - 1700 MHz
Output Frequency Band 2	950 - 1500 MHz
Output Frequency Band 3	950 - 1450 MHz
Tone Frequency	22 kHz ± 4 kHz

#### **RF SPECIFICATIONS**

Control Signal 1 13V / No Tone

Control Signal 2 13V / 22kHz Tone

Control Signal 3 18V / No Tone

Conversion Gain Max 65 dB

Conversion Gain Min 55 dB





Conversion Gain Typ 60 dB

**Gain Flatness (over Full Band)**  $\leq 6 \text{ dB p-p}$ 

Input VSWR 2.3:1 max.

Output P1db + 5 dBm min.

Output VSWR 2.2:1 max.

Phase Noise 0.1khz Offset Max Depends on External Reference

Phase Noise 1khz Offset Max Depends on External Reference

Phase Noise 10khz Offset Max Depends on External Reference

Phase Noise 100khz Offset Max Depends on External Reference

#### **ELECTRICAL SPECIFICATIONS**

Current Consumption 350 mA max

Power Requirements +12 to +24V DC

#### INTERFACE SPECIFICATIONS

IF Connector F-Connector

RF Input Connector WR-75 waveguide grooved

#### **ENVIRONMENTAL SPECIFICATIONS**

**Humidity** 0 - 95%

IP Rating IP 66

Temperature Operational  $-40^{\circ}\text{C to } +70^{\circ}\text{C}$ Temperature Storage  $-50 \text{ to } +80^{\circ}\text{C}$ 

#### PHYSICAL SPECIFICATIONS

Product Height 1.70 in

Product Length 4.46 in
Product Weight 0.255 kg

Product Width 1.72 in

#### LOGISTICS SPECIFICATIONS

HS Code Country of Origin Ex Works ECCN Number Unit Package

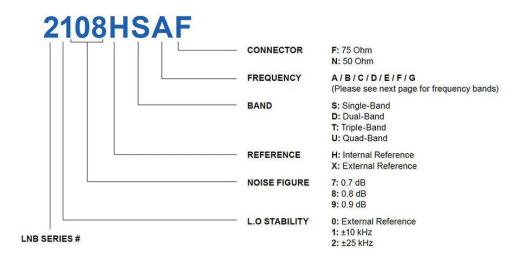
Made in Canada Richmond, BC, Canada EAR99  $135 \times 68 \times 48 \text{ mm}$  |

0.335 kg

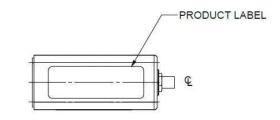
#### **HOW TO ORDER**

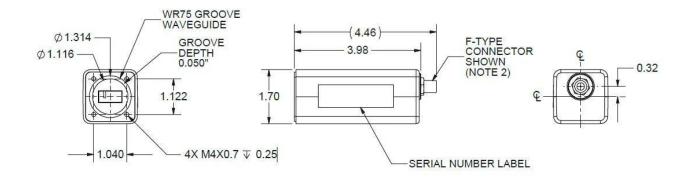






#### **MECHANICAL DIAGRAMS**







#### **FREQUENCY BANDS**

	Single Band					Dual Band					
Band	RF	freq (GHz)	L.O freq (GHz)	Output freq		Band	RF freq (GHz)		L.O freq (GHz)	Output freq	Voltage/Tone
A		1.7 - 12.20	10.75		- 1450 MHz		Band 1	10.95 - 11.70	10	950 - 1700 MHz	13 V
B C		2.25 - 12.75 0.95 - 11.70	11.3 10		- 1450 MHz - 1700 MHz	A					
D	10.70-11.80		9.75	950 - 2050 MHz		1	Band 2	11.70 - 12.75	10.75	950 - 2000 MHz	18 V
			Triple Band			Band 1	10.70 - 11.70	9.75	950 - 1950 MHz	13 V	
Band	RF	freq (GHz)	L.O freq (GHz)	Output freq	Voltage/Tone	В	Dana 1	10.10 11.10	0.10	1000 11112	
	Band 1	10.95 - 11.70	10	950 - 1700 MHz	13 V	С	Band 2	11.70 - 12.75	10.75	950 - 2000 MHz	18 V
A	Band 2	11.70 - 12.20	10.75	950 - 1450 MHz	13 V / 22 kHz		Band 1	10.95 - 11.70	10	950 - 1700 MHz	13 V
	Band 3	12.20 - 12.75	11.25	950 - 1500 MHz	18 V		Band 2	12.25 - 12.75	11.3	950 - 1450 MHz	18 V
	Band 1	10.95 - 11.70	10	950 - 1700 MHz	13 V	D	Band 1	10.70 - 11.70	9.75	950 - 1950 MHz	13 V
В	Band 2	11.70 - 12.25	10.75	950 - 1500 MHz	13 V / 22 kHz		Danu I	10.70 - 11.70	5.13	930 - 1930 WH12	15 4
	Band 3	12.25 - 12.75	11.3	950 - 1450 MHz	18 V		Band 2	11.70 - 12.75	10.6	1100 - 2150 MHz	18 V
	Dallu 3	12.25 - 12.75	11.3	930 - 1430 MHZ	10 V				Quad Band		
	Band 1	10.70 - 11.70	9.75	950 - 1950 MHz	13 V	Band	RF	freq (GHz)	L.O freq (GHz)	Output freq	Voltage/Tone
С	Band 2	11.70 - 12.20	10.75	950 - 1450 MHz	13 V / 22 kHz		Band 1	10.70 - 11.20	9.75	950 - 1450 MHz	13 V
	Band 3	12.20 - 12.75	11.25	950 - 1500 MHz	18 V	A	Band 2	11.20 - 11.70	10.25	950 - 1450 MHz	13 V / 22 kHz
	Band 1	10.70 - 11.70	9.75	950 - 1950 MHz	13 V		Band 3	11.70 - 12.25	10.75	950 - 1500 MHz	18 V
D	Band 2	11.70 - 12.25	10.75	950-1500 MHz	13 V / 22 kHz		Band 4	12.25 - 12.75	11.3	950 - 1450 MHz	18 V / 22kHz
	Band 3	12.25 - 12.75	11.3	950-1450 MHz	18 V	В	Band 1	10.70 - 10.95	9.75	950 - 1200 MHz	13 V
	Dallu 3	12.25 - 12.75	11.3	950-1450 WHZ	10 V		Band 2	10.95 - 11.70	10	950 - 1700 MHz	13 V / 22 kHz
	Band 1	10.95 - 11.70	10	950 - 1700 MHz	13 V		Band 3	11.70 - 12.25	10.75	950 - 1500 MHz	18 V
E	Band 2	11.55 - 12.25	10.6	950 - 1650 MHz	13 V / 22 kHz		Band 4	12.25 - 12.75	11.3	950 - 1450 MHz	18 V / 22kHz
	Band 3	12.20 - 12.70	11.25	950 - 1450 MHz	18 V	С	Band 1	10.70 - 11.20	9.75	950 - 1450 MHz	13 V
	Band 1	10.70 - 11.80	9.75	950 - 2050 MHz	13 V		Band 2	11.20 - 11.70	10.25	950 - 1450 MHz	13 V / 22 kHz
F	Band 2	10.95 - 12.10	10	950 - 2100 MHz	13 V / 22 kHz		Band 3	11.70 - 12.20	10.75	950 - 1450 MHz	18 V
	Band 3	11.70 - 12.75	10.75	950 - 2000 MHz	18 V		Band 4	12.20 - 12.75	11.25	950 - 1500 MHz	18 V / 22kHz
	Band 1	10.70 - 11.70	9.75	950 - 1950 MHz	13 V	- - D	Band 1	10.95 - 11.45	10	950 - 1450 MHz	13 V
G	Band 2	11.70 - 12.70	10.75	950 - 1950 MHz	13 V / 22 kHz		Band 2	11.45 - 11.95	10.5	950 - 1450 MHz	13 V / 22 kHz
G	Danu 2	11.70 - 12.70	10.75	900 - 1900 MM2			Band 3	11.70 - 12.20	10.75	950 - 1450 MHz	18 V
	Band 3	12.25 - 12.75	11.3	950 - 1450 MHz	18 V		Band 4	12.20 - 12.75	11.25	950 - 1500 MHz	18 V / 22kHz



