

# **2108HUDF**

# 2000 Quad-Band Ku-Band PLL LNB (0.8 dB)

**Frequency:** D: 10.95 - 11.70 GHz | 11.70 - 12.25 GHz |

12.25 - 12.75 GHz | 10.70 - 11.70 GHz

L.O. Stability: +/- 10 kHz 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
Input Frequency Band 4	10.70 - 11.70 GHz
LO Frequency 1	10.00 GHz
LO Frequency 2	10.75 GHz
LO Frequency 3	11.30 GHz
LO Frequency 4	9.75 GHz
LO Stability	±10 kHz
LO Type	PLL
Noise Figure Max	0.9 dB
Noise Figure Typ	0.8 dB
Number Of Onboard Los	Quad-Band
Output Frequency Band 1	950 - 1700 MHz
Output Frequency Band 2	950 - 1500 MHz
Output Frequency Band 3	950 - 1450 MHz
Output Frequency Band 4	950 - 1950 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

Control Signal 4 18V / 22kHz Tone

Conversion Gain Max 65 dB

**Conversion Gain Min** 55 dB

Conversion Gain Typ 60 dB

Gain Flatness (over Full Band)  $\leq$  6 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 -65 dBc/Hz

# **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

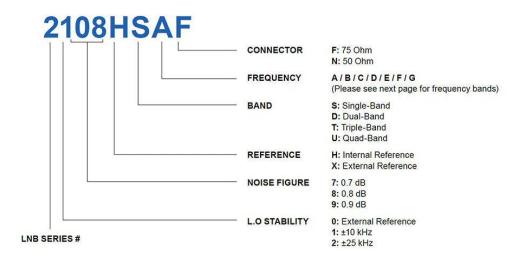
Made in Canada Richmond, BC, Canada EAR99 135 x 68 x 48 mm |

# **HOW TO ORDER**

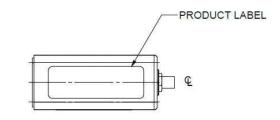


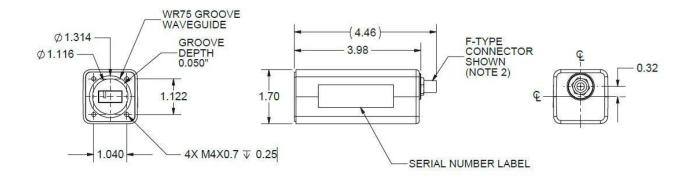
0.335 kg





#### **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	
Α		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	11.3 10		- 1450 MHz	A	Dana 1	10.33 - 11.70		000 1700 Mile		
D	10.95 - 11.70 10.70-11.80		9.75	950 - 1700 MHz 950 - 2050 MHz			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	Banu 1	10.70 - 11.70	9.75	950 - 1950 MHZ	13 V	
	Band 1	10.95 - 11.70	10	950 - 1700 MHz	13 V		Band 2	11.70 - 12.75	10.75	950 - 2000 MHz	18 V	
Α	Band 2	11.70 - 12.20	10.75	950 - 1450 MHz	13 V / 22 kHz	С	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 WITZ	13 V	
							Band 2	11.70 - 12.75	10.6	1100 - 2150 MHz	18 V	
	Band 3	12.25 - 12.75	11.3	950 - 1450 MHz	18 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	A	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		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	
						В	Band 1	10.70 - 10.95	9.75	950 - 1200 MHz	13 V	
	Band 3	12.25 - 12.75	11.3	950-1450 MHz	18 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	
							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	



