

# **7100HUAF**

# 7000 Quad-Band Ka-Band PLL LNB

Frequency: A: 17.20 - 18.20 GHz | 18.20 - 19.20 GHz | 19.20 - 20.20 GHz | 20.20 - 21.20 GHz

L.O. Stability: +/- 10 kHz Output Connector: F: 75 Ohm









# **KEY SPECIFICATIONS**

Band	Ka-Band
Input Frequency Band 1	17.20 - 18.20 GHz
Input Frequency Band 2	18.20 - 19.20 GHz
Input Frequency Band 3	19.20 - 20.20 GHz
Input Frequency Band 4	20.20 - 21.20 GHz
LO Frequency 1	16.25 GHz
LO Frequency 2	17.25 GHz
LO Frequency 3	18.25 GHz
LO Frequency 4	19.25 GHz
LO Stability	±10 kHz
LO Type	PLL
Noise Figure Max	1.5 dB
Noise Figure Typ	1.3 dB
Number Of Onboard Los	Quad-Band
Output Frequency Band 1	950 - 1950 MHz
Output Frequency Band 2	950 - 1950 MHz
Output Frequency Band 3	950 - 1950 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)**  $\leq 5 \text{ dB p-p max}.$ 

 Input VSWR
 2.5 : 1 max.

 Output P1db
 + 5 dBm min.

## **ELECTRICAL SPECIFICATIONS**

Current Consumption 450 mA max

Power Requirements +12 to +24V DC

## **INTERFACE SPECIFICATIONS**

IF Connector F-Connector

RF Input Connector WR-42 Waveguide Grooved

## **ENVIRONMENTAL SPECIFICATIONS**

**Humidity** 0 - 100%

IP Rating IP 66

Temperature Operational -40°C to +70°C

Temperature Storage -45 to +80°C

### PHYSICAL SPECIFICATIONS

Product Height 1.70 in

**Product Length** 4.67 in

Product Weight 0.4 kg
Product Width 1.72 in

### LOGISTICS SPECIFICATIONS

HS Code Country of Origin Ex Works ECCN Number Unit Package

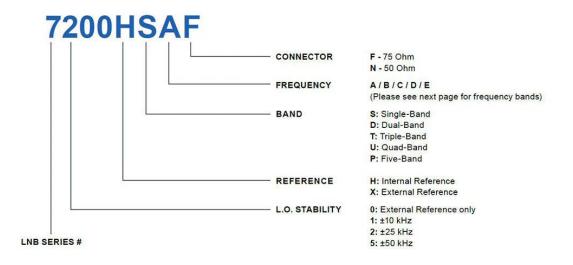
Made in Canada Richmond, BC, Canada EAR99 135 mm x 68 mm x 48

mm | 0.48 kg

### **HOW TO ORDER**

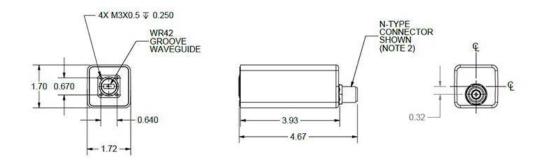






## **MECHANICAL DIAGRAMS**







Dual Band				Triple Band				
Band	RF freq. (GHz)		Voltage/Tone	Band	RF Freq. (GHz)		Voltage/Tone	
A	Band 1	17.75 - 18.75	13 V	A	Band 1	17.70 - 18.70	13 V	
		- Table Committee Committe	Philipson Co.		Band 2	18.45 - 19.45	13 V / 22 kHz	
	Band 2	18.35 - 19.35	18 V		Band 3	19.20 - 20.20	18 V	
В	Band 1	18.20 - 19.20	13 V	150	Band 1	17.70 - 18.70	13 V	
		20/20/ 20/22	12.72	В	Band 2	18.70 - 19.70	13 V / 22 kHz	
	Band 2	19.20 - 20.20	18 V		Band 3	19.70 - 20.20	18 V	
С	Band 1	18.40 - 19.40	13 V	С	Band 1	17.90 - 18.30	13 V	
					Band 2	18.30 - 19.30	13 V / 22 kHz	
	Band 2	19.20 - 20.20	18 V		Band 3	19.30 - 20.30	18 V	
D	Band 1	19.20 - 20.20	13 V	D	Band 1	18.20 - 19.2 <b>0</b>	13 V	
	2 72	726/02 49/201	02507		Band 2	19.20 - 20.20	13 V / 22 kHz	
	Band 2	20.20 - 21.20	18 V		Band 3	20.20 - 21.20	18 V	
E	Band 1	17.20 - 18.20	13 V	E	Band 1	17.50 - 18.50	13 V	
	P 10	47.50 40.50	1011		Band 2	18.20 - 19.20	13 V / 22 kHz	
	Band 2	17.50 - 18.50	18 V		Band 3	19.20 - 20.20	18 V	
Quad Band			Five Band					
Band	RF	Freq. (GHz)	Voltage/Tone	Band	RF Freq. (GHz)		Voltage/Tone	
A	Band 1	17.20 - 18.20	13 V	A	Band 1	17.20 - 18.20	13 V	
	Band 2	18.20 - 19.20	13 V / 22 kHz					
	Band 3	19.20 - 20.20	18 V		Band 2	18.00 - 19.00	13 V / 22 kHz	
	Band 4	20.20 - 21.20	18 V / 22 kHz		Band 3	18.70 - 19.70	18 V	
В	Band 1	17.50 - 18.50	13 V		] <sup>*</sup>	Datid 3	10.70 - 19.70	18 V
	Band 2	18.40 - 19.40	13 V / 22 kHz		Band 4	19.40 - 20.40	18 V / 22 kHz	
	Band 3	19.30 - 20.30	18 V		1 100 mm	200 N SEA 280	25500	
	Band 4	20.20 - 21.20	18 V / 22 kHz		Band 5	20.30 - 21.30	24 V	



