

## **Innovative Communication Solutions**

# 2009XUAF

# 2000 Quad-Band Ku-Band PLL LNB

#### (0.9 dB)

Frequency: A: 10.70 - 11.20 GHz | 11.20 - 11.70 GHz | 11.70 - 12.25 GHz | 12.25 - 12.75 GHz L.O. Stability: External Reference Output Connector: F: 75 Ohm





# **KEY SPECIFICATIONS**

Band	Ku-Band
Input Frequency Band 1	10.70 - 11.20 GHz
Input Frequency Band 2	11.20 - 11.70 GHz
Input Frequency Band 3	11.70 - 12.25 GHz
Input Frequency Band 4	12.25 - 12.75 GHz
LO Frequency 1	9.75 GHz
LO Frequency 2	10.25 GHz
LO Frequency 3	10.75 GHz
LO Frequency 4	11.30 GHz
LO Stability	Ext Ref
LO Туре	PLL
Noise Figure Max	1.0 dB
Noise Figure Typ	0.9 dB
Number Of Onboard Los	Quad-Band
Output Frequency Band 1	950 - 1450 MHz
Output Frequency Band 2	950 - 1450 MHz
Output Frequency Band 3	950 - 1500 MHz
Output Frequency Band 4	950 - 1450 MHz
Tone Frequency	22 kHz ± 4 kHz

# **RF SPECIFICATIONS**

Control Signal 1		
Control Signal 2		

13V / No Tone 13V / 22kHz Tone

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		Inr	novative Com	nunication Solutions
Control Signal 3		18V / No Tor	ne	
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)	≤ 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 Offs	set Max	Depends on	External Reference	
ELECTRICAL S	<b>SPECIFICATIO</b>	NS		
Current Consumption		350 mA max		
Power Requirements		+12 to +24V	DC	
INTERFACE SP	PECIFICATION	S		
IF Connector		F-Connector		
<b>RF Input Connector</b>		WR-75 wave	guide grooved	
ENVIRONMEN	TAL SPECIFIC	ATIONS		
Humidity		0 - 95%		
IP Rating		IP 66		
Temperature Operationa	I	-40°C to +70	°C	
Temperature Storage		-50 to +80°C		
PHYSICAL SPE	ECIFICATIONS			
Product Height		1.70 in		
Product Length		4.46 in		
Product Weight		0.255 kg		
Product Width		1.72 in		
LOGISTICS SP	ECIFICATIONS	5		
HS Code	Country of Origin	Ex Works	ECCN Number	Unit Package
8517690000	Made in Canada	Richmond, BC, Canada	EAR99	135 x 68 x 48 mm   0.335 kg
HOW TO ORDE	-R			

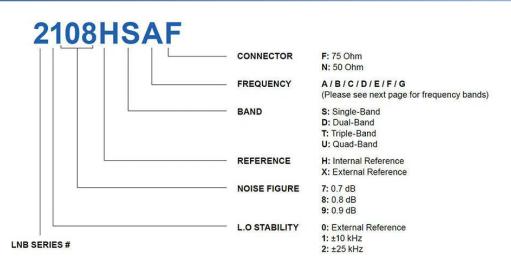
# **HOW TO ORDER**



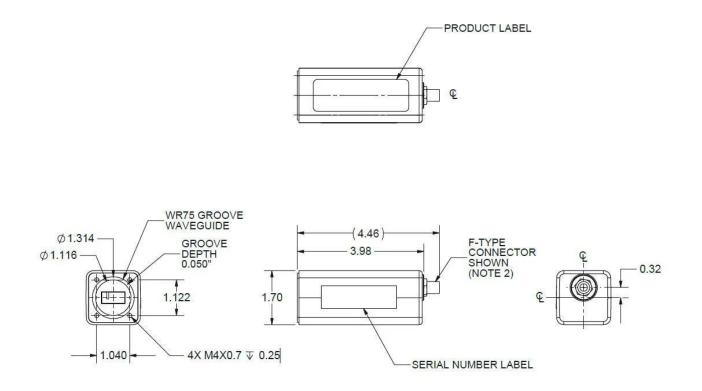
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# **MECHANICAL DIAGRAMS**







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## **Innovative Communication Solutions**

### **FREQUENCY BANDS**

			Single Band						Dual Band			
Band	RF	freq (GHz)	L.O freq (GHz)	O	utput freq	Band	RF	freq (GHz)	L.O freq (GHz)	Output freq	Voltage/Tone	
A		1.7 - 12.20	10.75		- 1450 MHz	A	Band 1	10.95 - 11.70	10	950 - 1700 MHz	13 V	
B		2.25 - 12.75 ).95 - 11.70	11.3 10		- 1450 MHz - 1700 MHz		Band 2	10.00 11.70		000 1100 1112		
D		0.70-11.80	9.75		- 1700 MHz			11.70 - 12.75	10.75	950 - 2000 MHz	18 V	
			Triple Band	1			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	в	Dallu I	10.70 - 11.70	9.75	900 - 1900 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	
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	c	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		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	D	Danu I	10.70 - 11.70	5.15	350 - 1350 MHZ	13 Y	
_						-	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			1	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	1	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 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	в	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	в	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	C	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	
0							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	



Esatcom Inc Norsat authorized distributor www.esatcom.com Tel 718.799.0084

Email sales@esatcom.com