

Innovative Communication Solutions

2209HUCF

2000 Quad-Band Ku-Band PLL LNB

(0.9 dB)

Frequency: C: 10.70 - 11.20 GHz | 11.20 - 11.70 GHz | 11.70 - 12.20 GHz | 12.20 - 12.75 GHz L.O. Stability: +/- 25 kHz 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 - 12.20 GHz
Input Frequency Band 4	12.20 - 12.75 GHz
LO Frequency 1	9.75 GHz
LO Frequency 2	10.25 GHz
LO Frequency 3	10.75 GHz
LO Frequency 4	11.25 GHz
LO Stability	±25 kHz
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 - 1450 MHz
Output Frequency Band 4	950 - 1500 MHz
Tone Frequency	22 kHz ± 4 kHz

RF SPECIFICATIONS

Control Signal 1	13V / No Tone
Control Signal 2	13V / 22kHz Tone





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Control Signal 3		18V / No To	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 mir	۱.			
Output VSWR		2.2 : 1 max.				
Phase Noise 0.1khz Offs	et Max	-125 dBc/Hz	<u>.</u>			
ELECTRICAL S	PECIFICATION	NS				
Current Consumption		350 mA max	(
Power Requirements		+12 to +24\	/ DC			
INTERFACE SP	ECIFICATION	S				
IF Connector		F-Connecto	r			
RF Input Connector	Input Connector WR-75 waveguide grooved					
ENVIRONMENT		ATIONS				
Humidity		0 - 95%				
IP Rating		IP 66				
Temperature Operational	-40°C to +70°C					
Temperature Storage		-50 to +80°C				
PHYSICAL SPE	CIFICATIONS					
Product Height		1.70 in				
Product Length		4.46 in				
Product Weight		0.255 kg				
Product Width		1.72 in				
LOGISTICS SPI	ECIFICATIONS	6				
HS Code	Country of Origin	Ex Works	ECCN Number	Unit Package		
	Made in Canada	Richmond, BC, Canada	EAR99	135 x 68 x 48 mm 0.335 kg		
	D					

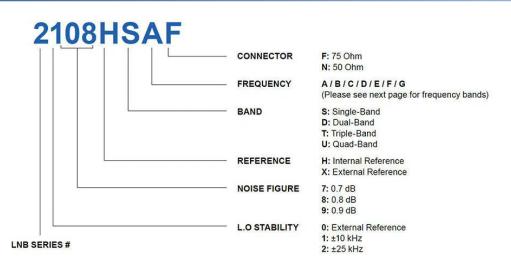
HOW TO ORDER



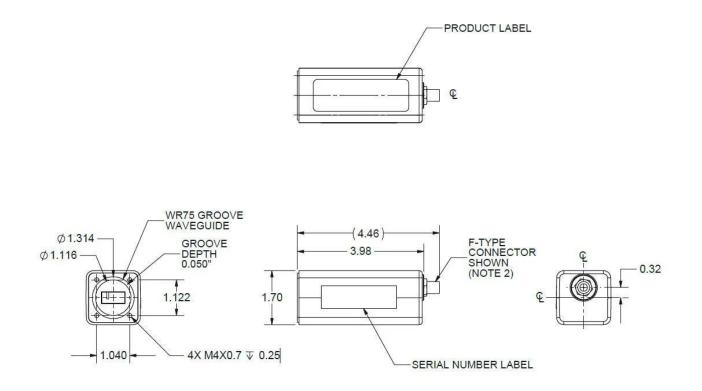
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MECHANICAL DIAGRAMS







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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 0.95 - 11.70	11.3 10		- 1450 MHz		Dana	10.00 11.10			
D		0.70-11.80	9.75	950 - 1700 MHz 950 - 2050 MHz			Band 2	11.70 - 12.75	10.75	950 - 2000 MHz	18 V
	1		Triple Band	330 - 2030 Militz			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	Danu i	10.70 - 11.70	5.15	330 - 1330 Miliz	13 4
	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	5.15	530 - 1530 MHZ	13 4
_							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	A	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
6						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	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