



LNB

KU-BAND SINGLE / MULTI BAND PLL 2000 Series

SPECIFICATIONS

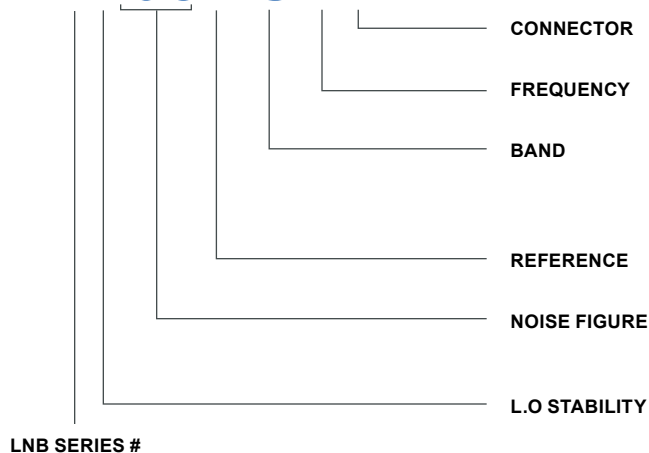
Noise Figure (room temperature: 17°C)	0.7 dB typ., 0.8 dB max. at room temp. @ CF 0.8 dB typ., 0.9 dB max. at room temp. @ CF 0.9 dB typ., 1.0 dB max. at room temp. @ CF
L.O. Stability	±10kHz, ±25 kHz
Phase Noise (SSB) max.	-75 dBc at 1 kHz -80 dBc at 10 kHz -93 dBc at 100 kHz
Input VSWR	2.3 : 1 max.
Output VSWR	2.2 : 1 max.
Gain	60 dB Typ., 55 dB min. 65 dB max.
Gain Flatness (over full band)	≤ 6 dB p-p
Output P1dB	+ 5 dBm min.



DC Power	+ 12V to + 24V DC (See below for Band Select)
Tone:	Frequency 22 kHz ±4 kHz Amplitude Voltage 0.6 ± 0.2 V Duty Cycle 50% ±10%
Current	350 mA max.
Input (waterproof)	WR-75 waveguide grooved
Output (waterproof)	F-Connector (75 Ohm) N-Connector (50 Ohm)
Dimensions (L x W x H)	113 mm x 44 mm x 43 mm (4.46 in x 1.72 in x 1.70 in)
Weight	300 g (14.11 oz)
Operating Temperature	- 40 to +70°C
Storage Temperature	- 50 to +80°C

HOW TO ORDER

2108HSAF



F: 75 Ohm
N: 50 Ohm

A / B / C / D / E / F / G
(Please see next page for frequency bands)

S: Single-Band
D: Dual-Band
T: Triple-Band
U: Quad-Band

H: Internal Reference
X: External Reference

7: 0.7 dB
8: 0.8 dB
9: 0.9 dB

0: External Reference
1: ±10 kHz
2: ±25 kHz



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	11.7 - 12.20		10.75	950 - 1450 MHz		A	Band 1	10.95 - 11.70	10	950 - 1700 MHz	13 V
B	12.25 - 12.75		11.3	950 - 1450 MHz			Band 2	11.70 - 12.75	10.75	950 - 2000 MHz	18 V
C	10.95 - 11.70		10	950 - 1700 MHz							
D	10.70-11.80		9.75	950 - 2050 MHz							
Triple Band						B	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		Band 2	11.70 - 12.75	10.75	950 - 2000 MHz	18 V
A	Band 1	10.95 - 11.70	10	950 - 1700 MHz	13 V						
	Band 2	11.70 - 12.20	10.75	950 - 1450 MHz	13 V / 22 kHz	C	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
B	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
	Band 2	11.70 - 12.25	10.75	950 - 1500 MHz	13 V / 22 kHz		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						
C	Band 1	10.70 - 11.70	9.75	950 - 1950 MHz	13 V	Quad Band					
	Band 2	11.70 - 12.20	10.75	950 - 1450 MHz	13 V / 22 kHz	Band	RF freq (GHz)		L.O freq (GHz)	Output freq	Voltage/Tone
	Band 3	12.20 - 12.75	11.25	950 - 1500 MHz	18 V	A	Band 1	10.70 - 11.20	9.75	950 - 1450 MHz	13 V
D	Band 1	10.70 - 11.70	9.75	950 - 1950 MHz	13 V		Band 2	11.20 - 11.70	10.25	950 - 1450 MHz	13 V / 22 kHz
	Band 2	11.70 - 12.25	10.75	950-1500 MHz	13 V / 22 kHz		Band 3	11.70 - 12.25	10.75	950 - 1500 MHz	18 V
	Band 3	12.25 - 12.75	11.3	950-1450 MHz	18 V	Band 4	12.25 - 12.75	11.3	950 - 1450 MHz	18 V / 22kHz	
E	Band 1	10.95 - 11.70	10	950 - 1700 MHz	13 V	B	Band 1	10.70 - 10.95	9.75	950 - 1200 MHz	13 V
	Band 2	11.55 - 12.25	10.6	950 - 1650 MHz	13 V / 22 kHz		Band 2	10.95 - 11.70	10	950 - 1700 MHz	13 V / 22 kHz
	Band 3	12.20 - 12.70	11.25	950 - 1450 MHz	18 V		Band 3	11.70 - 12.25	10.75	950 - 1500 MHz	18 V
F	Band 1	10.70 - 11.80	9.75	950 - 2050 MHz	13 V	C	Band 4	12.25 - 12.75	11.3	950 - 1450 MHz	18 V / 22kHz
	Band 2	10.95 - 12.10	10	950 - 2100 MHz	13 V / 22 kHz		Band 1	10.70 - 11.20	9.75	950 - 1450 MHz	13 V
	Band 3	11.70 - 12.75	10.75	950 - 2000 MHz	18 V		Band 2	11.20 - 11.70	10.25	950 - 1450 MHz	13 V / 22 kHz
G	Band 1	10.70 - 11.70	9.75	950 - 1950 MHz	13 V	D	Band 3	11.70 - 12.20	10.75	950 - 1450 MHz	18 V
	Band 2	11.70 - 12.70	10.75	950 - 1950 MHz	13 V / 22 kHz		Band 4	12.20 - 12.75	11.25	950 - 1500 MHz	18 V / 22kHz
	Band 3	12.25 - 12.75	11.3	950 - 1450 MHz	18 V		Band 1	10.95 - 11.45	10	950 - 1450 MHz	13 V
						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 4	12.20 - 12.75	11.25	950 - 1500 MHz	18 V / 22kHz	

MECHANICAL DIAGRAM

