



## LNB

### C-BAND EXT. REF.

### 3000X-2



#### TYPICAL SPECIFICATIONS

<b>Noise temperature</b>	20K to 30K depending on model number
<b>L.O. stability</b>	Phase Locked to External Reference
<b>L.O. Leakage</b>	-45 dBm max @ Waveguide input
<b>Phase noise (SSB)</b>	-75 dBc/Hz at 1kHz -85 dBc/Hz at 10kHz -95 dBc/Hz at 100kHz
<b>Requirement for Ext. Ref.</b>	Supplied through the centre conductor of IF cable
Frequency	10 MHz (sine wave)
Input Level	0 to -10 dBm @ IF out
Phase noise	-144 dBc/Hz max at 1kHz -154 dBc/Hz max at 10kHz -154 dBc/Hz max at 100kHz
<b>Input VSWR</b>	2.3 : 1
<b>Output VSWR</b>	2.0 :1 (2.5:1 @ 75 Ω)

<b>Conversion gain</b>	62 dB
<b>Gain Ripple</b>	1 dB p-p max per 36 MHz segment across the operating freq. band
<b>Image Rejection</b>	-45 dBc max.
<b>Spurious in Rx band</b>	-130 dBm max @ waveguide input excluding Rx out ± 1 MHz measured at RF input power -85 dBm
<b>Output P1dB</b>	10 dBm
<b>Power requirements</b>	+12 to +24 V supplied through center conductor of IF cable
<b>Current drain</b>	300 mA
<b>Input Waveguide</b>	CPR229G
<b>Dimensions</b>	144 (L) x 70 (W) x 98 (H) mm (5.7 x 2.8 x 3.9 in)
<b>Weight</b>	580 g / 18 oz
<b>Operational Temperature</b>	-40°C to +60°C
<b>Storage Temperature</b>	-40°C to +80°C

#### FREQUENCY BANDS AVAILABLE

<b>Input frequency (GHz)</b>	3.40 to 4.20
<b>L.O. frequency (GHz)</b>	5.15
<b>Output frequency (MHz)</b>	950 to 1750

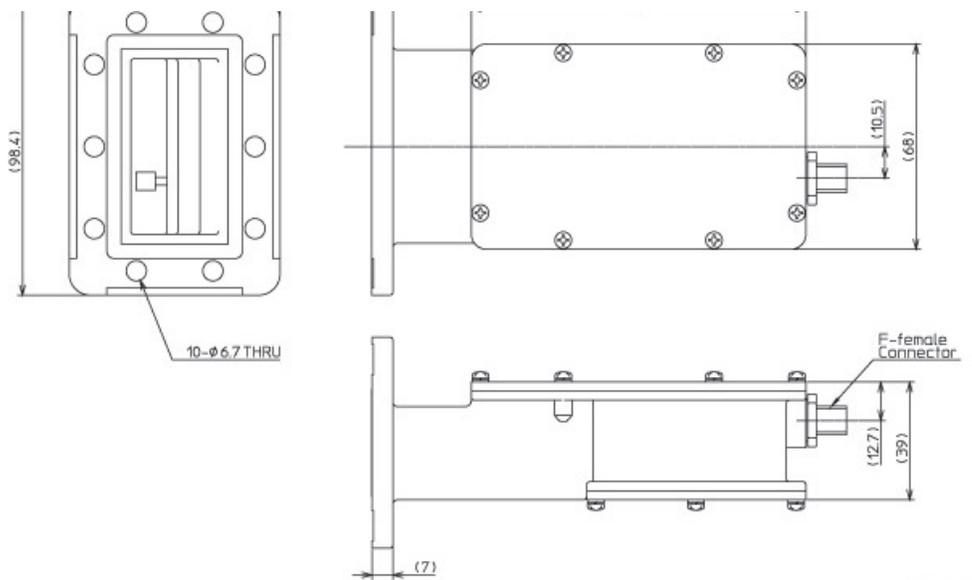
#### HOW TO ORDER

### 3020X-2N

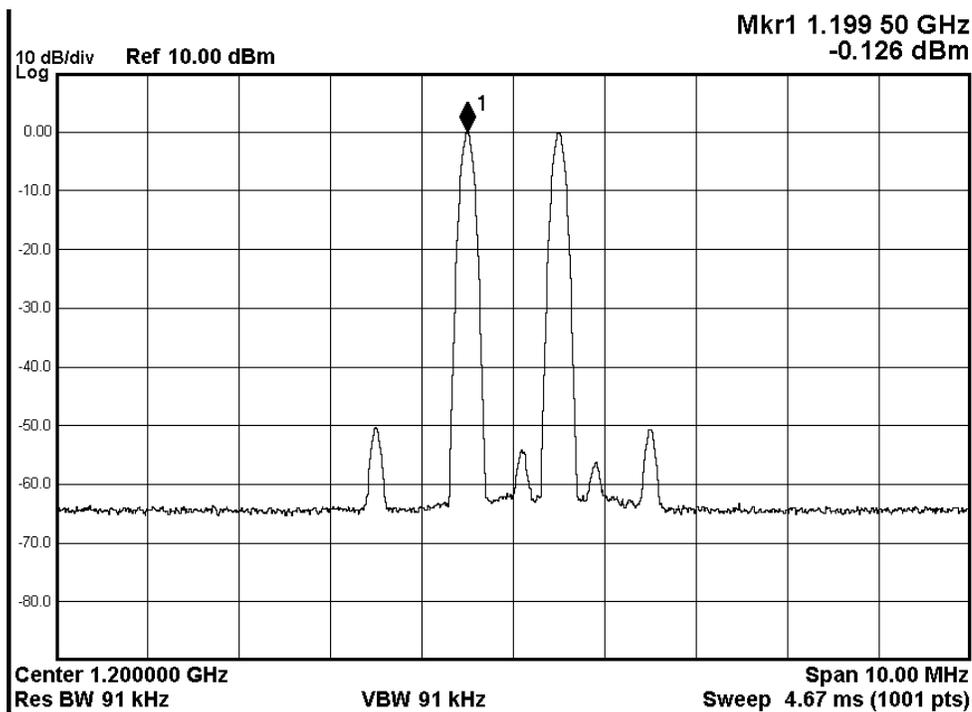
CONNECTOR	F - 75 Ohm N - 50 Ohm
EXTERNAL REFERENCE	
NOISE TEMPERATURE	20 - 20 K 25 - 25 K 30 - 30 K
LNB SERIES #	



# MECHANICAL DIAGRAM



# TEST DATA



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