

Internal Reference
C band PLL LNB (LO: 5.15 GHz)

Model No. NJS8487H

(Stability: +/- 10ppm)

Specifications

Rev.01 December 17, 2004

Copyright 2004

New Japan Radio Co., Ltd

Microwave Components Division

-Notice of Proprietary Information-

This documents and its contents are proprietary to New Japan Radio Co., Ltd.
This publication and its contents may not be reproduced or distributed for any
other purpose without the written permission of New Japan Radio., Ltd



1. Electrical Specifications

1-1.	Input Frequency Band	3.625 to 4.200 GHz
1-2.	Input V.S.W.R.	3.0 : 1 max.
1-3.	Noise Temperature (Ta:+25 C)	15 K typ. 30 K max.
1-4.	Output Frequency	950 to 1,525 MHz
1-5.	Conversion Gain (Ta: +25 C)	59 dB min. 66 dB max.
1-6.	Conversion Gain Ripple (Ta: +25 C)	2 dBp-p max. at 50 MHz segments.
1-7.	Conversion Gain Flatness over Freq. (Ta: +25 C)	5 dBp-p max. at 575 MHz BW
1-8.	Conversion Gain Variation over Temperature	5 dB max.
1-9.	Output Power for 1 dB Gain Compression	+3 dBm min.
1-10.	Intermodulation Products (3rd order Intermodulation rejection with two -75 dBm input carriers separated by 10 MHz.)	45 dB min
1-11.	Output Intercept Point	+13 dBm min.
1-12.	Local Oscillator Frequency (Ta: -40 to +60 C)	5.15 GHz +/- 10 ppm
1-13.	Phase Noise (SSB)	-70 dBc/Hz typ. -63 dBc/Hz max. at 100 Hz -80 dBc/Hz typ. -73 dBc/Hz max. at 1 kHz -85 dBc/Hz typ. -83 dBc/Hz max. at 10 kHz -95 dBc/Hz typ. -90 dBc/Hz max. at 100 kHz -105 dBc/Hz typ. -100 dBc/Hz max. at 1 MHz
1-14.	Spurious	a) -140 dBm max. at input, Fixed frequency spur, unrelated to test CW signal. (Measured at specified IF band ; 950 to 1,525 MHz) b) -55 dBc max. With test CW signal -10 dBm IF output (Measured at specified IF band ; 950 to 1,525 MHz)
1-15.	Image Rejection	60 dB min.
1-16.	Output V.S.W.R.(75 ohm)	2.5 : 1 max.
1-17.	Input Voltage	+12 to +24 V DC
1-18.	Current Drain	350 mA max.

2. Mechanical Specifications

2-1.	Input Waveguide Flange	CPR-229G
2-2.	Output Connector	F-type female 75 ohm
2-3.	Dimension & Housing	96.1 mm (L) x 99.6 mm (W) x 76 mm (H) [3.78" (L) x 3.92" (W) x 2.99" (H)]
2-4.	Weight	800 g max. [1.76 lbs]
2-5.	Vibration	5 G (f : 50 Hz, T : 5 min. Direction : X,Y,Z)
2-6.	Shock	15 G (Direction: X,Y,Z)

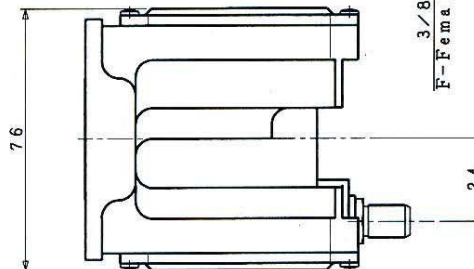
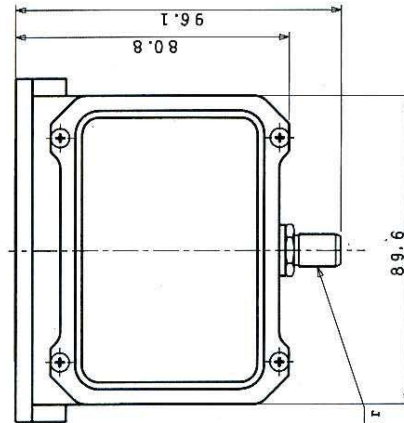
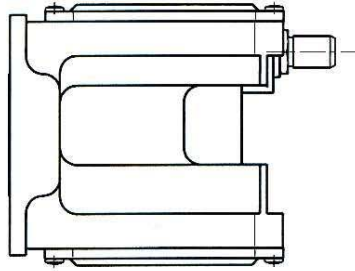
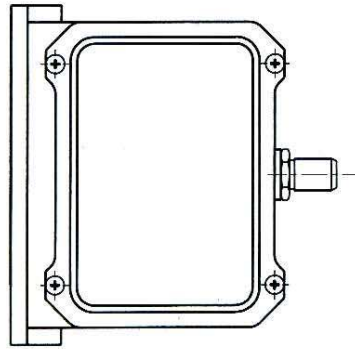
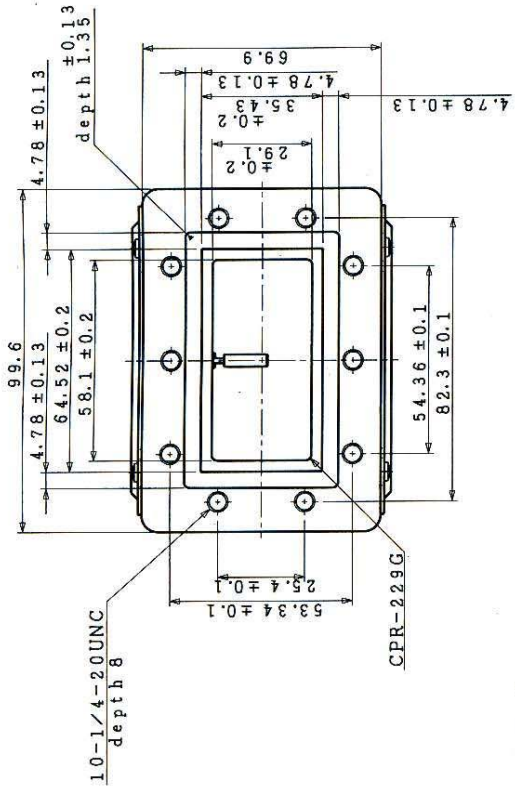
3. Environmental Specifications

3-1.	Operating Temperature Range	-40 to +60 C
3-2.	Storage Temperature Range	-40 to +80 C
3-3.	Humidity	100 % Rh max.
3-4.	Altitude	15,000 feet

4. Absolute Maximum Rating

4-1.	RF Input Power	-10 dBm (@ CW), +10 dBm (@ Pulse)
4-2.	Supply Voltage	+28 V DC

5. Outline Drawing



UNIT: mm
Tolerance ± 0.5