

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

Model No. NJS8487H

(Stability: +/- 10ppm)

Specifications

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New Japan Radio Co., Ltd

Microwave Components Division

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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

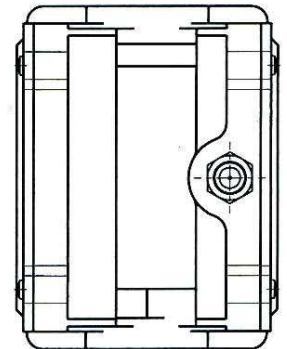
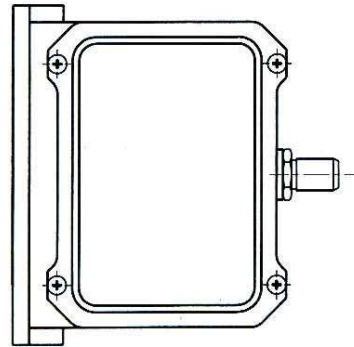
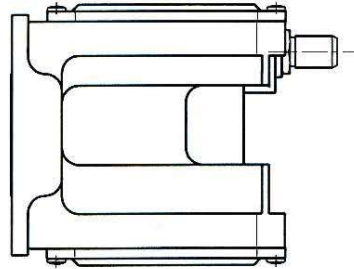
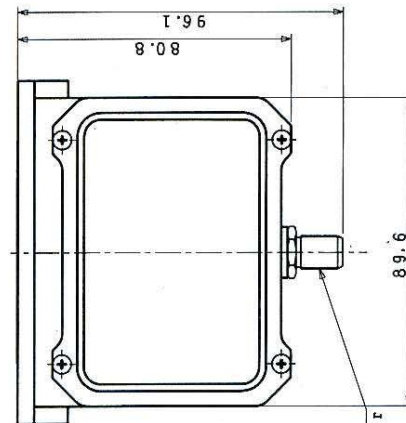
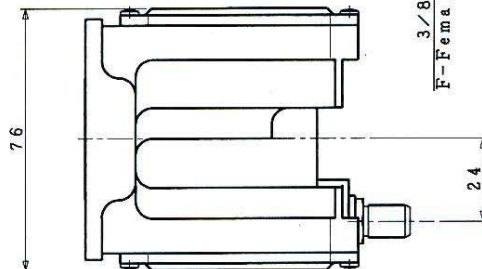
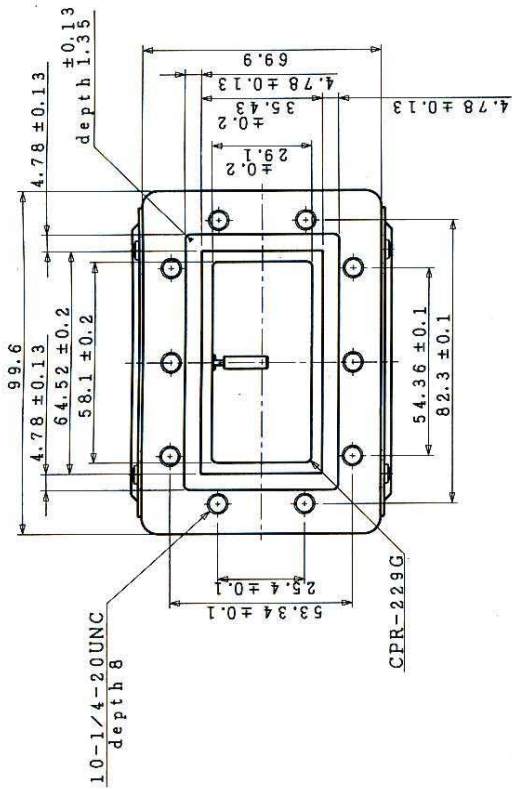
4. Absolute Maximum Rating

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

-Preliminary-



5. Outline Drawing



UNIT: mm
Tolerance ±0.5