

Ku band Single LNB
Model No. NJR2744H series
Specifications
Rev.03M January 8, 2003

Copyright 2003

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 Co., Ltd.



1. Scope

This specification details the requirements for the low noise amplifier and block downconverter for use in Ku-Band VSAT remote RF Terminals.

All specifications shall apply throughout the full range of the specified environmental conditions unless otherwise specified.

2. Electrical Specifications

#	Item	Specification
2-1.	Frequency Band	11.70 to 12.2 GHz
2-2.	Input Waveguide Flange	WR 75
2-3.	Input V.S.W.R.	2.5:1 typ.
2-4.	Noise Figure (Ta = +25C)	0.5 to 0.8 dB *Remark
2-5.	Output Frequency	0.95 to 1.45 GHz
2-6.	Conversion Gain	55 dB typ. @+25C 50 dB min. 63 dB max. (Ta = -40 to +60 C)
2-7.	Conversion Gain Variation (Ta = +25C)	2 dB max. in any 50 MHz segment over frequency band.
2-8.	IM3	-40 dBc max. @-15dBm IF Output
2-9.	Local Oscillator Leakage Levels	-50 dBm max. at the waveguide flange.
2-10.	Local Oscillator Frequency Stability (Ta = -40 to +60C)	10.750 GHz +/- 900 kHz
2-11.	Image Rejection	40 dB min.
2-12.	Output V.S.W.R.	2.0 : 1 max.
2-13.	Power Requirement	+15 to +24V Option : +12 to +24 V dc
2-14.	Current Drain	110 mA typ. 150 mA max.
2-15.	Phase Noise	-65 dBc/Hz typ. -60 dBc/Hz max. @1 kHz -90 dBc/Hz typ. -80 dBc/Hz max. @10 kHz -110 dBc/Hz typ. -100 dBc/Hz max. @100 kHz

3. Environmental Specifications

#	Item	Specification
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.	Vibration	G=5 (f=50±2 Hz, t=5(min), Direction ; X,Y,Z)
3-5.	Shock	G=15 (Direction ; X,Y,Z)

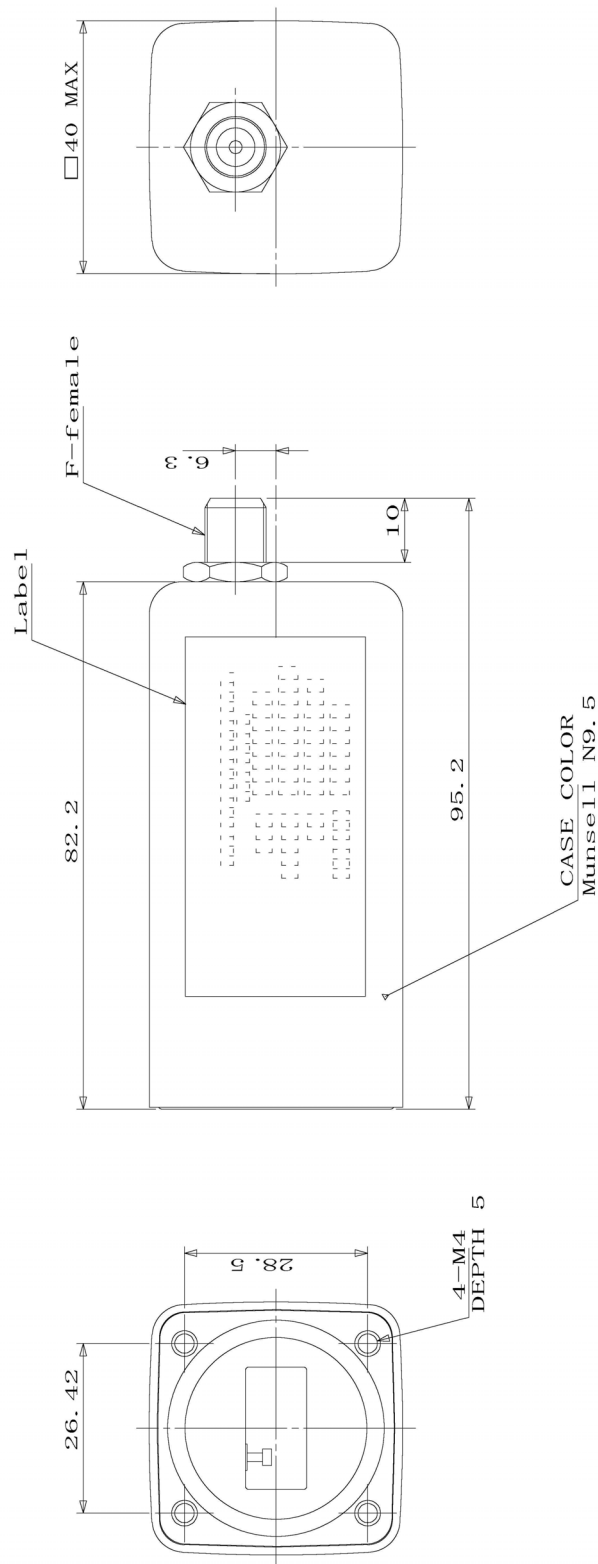
4. Absolute Maximum Rating

#	Item	Specification
4-1.	RF Input Power	-10 dBm (@ CW) +10 dBm (@ Pulse)
4-2.	Supply Voltage	+28 Vdc

*Remark : The type No. of the NJR2744H is changed by maximum Noise Figure as follows.

NJR2744HK 0.8 dB max
 NJR2744HL 0.7 dB max.
 NJR2744HM 0.6 dB max.
 NJR2744HN 0.5 dB max.

5. Outline Drawing



Unit : mm