



External Reference Type Ku-band PLL LNB

MODEL NO. NJR2633E / EN0 MODEL NO. NJR2636E / EN0

MODEL NO. NJR2634E / EN0 MODEL NO. NJR2637E / EN0

MODEL NO. NJR2635E / EN0 MODEL NO. NJR2639E / EN0

<Description>

This specification defines the Low Noise Block downconverter (LNB) intended for the satellite data communication downlink application in the Ku-band. This LNB has a combined 3-stage HEMT amplifier and block downconverter with Phase Locked Local, which is constituted with a VCO, SPD (Sampling Phase Detector), Loop Filter and Reference Recovery VCXO providing low phase noise. All specifications shall apply throughout the full range of the specified environmental conditions unless otherwise specified.

<Line-Up>

Model No.	RF Frequency	Local Frequency	Local Stability	IF Frequency
NJR2637E / EN0	10.95 to 11.70 GHz	10.00 GHz	Depends on External reference	950 to 1,700 MHz
NJR2639E / EN0	11.20 to 11.70 GHz	10.25 GHz		950 to 1,450 MHz
NJR2633E / EN0	11.45 to 11.95 GHz	10.50 GHz		950 to 1,450 MHz
NJR2635E / EN0	11.70 to 12.20 GHz	10.75 GHz		950 to 1,450 MHz
NJR2634E / EN0	12.20 to 12.70 GHz	11.25 GHz		950 to 1,450 MHz
NJR2636E / EN0	12.25 to 12.75 GHz	11.30 GHz		950 to 1,450 MHz

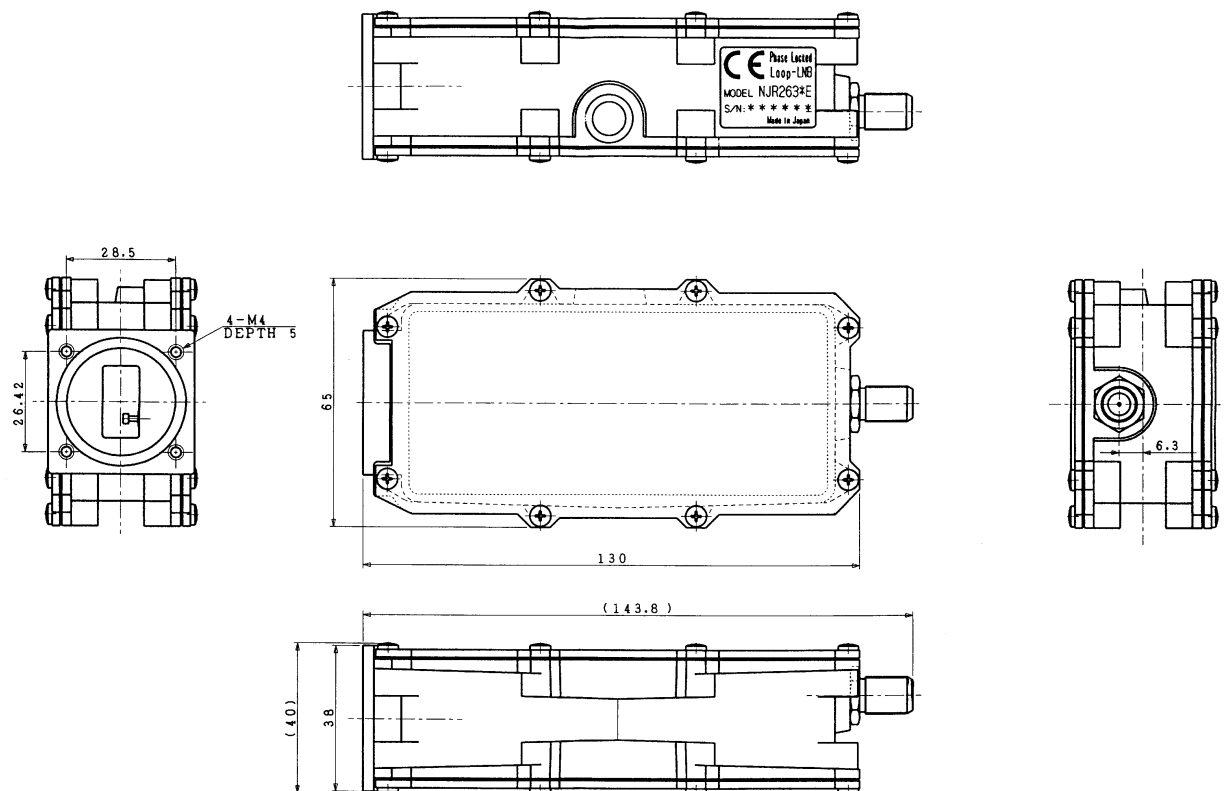
<Specifications>

Item	Specifications
Input Waveguide Flange	WR75
Output Connector	Type F-female (75 ohm) <Model No. NJR2633E / 34E / 35E / 36E / 37E / 39E > Type N-female (50 ohm) <Model No. NJR2633EN0 / 34EN0 / 35EN0 / 36EN0 / 37EN0 / 39EN0 > Option1: N-male, Option2: TNC female
Noise Figure (at 25 °C)	0.9 dB typ.
Conversion Gain (at 25 °C)	55 dB min. 60 dB typ.
Conversion Gain Variation (at 25 °C)	2 dB max. In any 50 MHz segment over the frequency band.
P1dB	+10 dBm min.
Phase Noise (SSB)	-63 dBc/Hz at 100 Hz -73 dBc/Hz at 1 kHz -83 dBc/Hz at 10 kHz -93 dBc/Hz at 100 kHz
External Reference Input Frequency	10 MHz
External Reference Input Power	-10 to 0 dBm (75ohm or 50 ohm) @ IF output connector
External Reference Input Port	IF output connector (combine reference with IF signal)
External Reference Phase Noise	-135 dBc/Hz at 100Hz -143 dBc/Hz at 1kHz -145 dBc/Hz at 10kHz (Input Condition)
Spurious	-140 dBm max. At input, fixed frequency spurious, unrelated to test CW signal. -50 dBc max. With test CW signal -10dBm IF output. (measured at specified IF band ; 950 to 1,450 MHz or 1,700MHz)



Item	Specifications
Power Requirement	+15 to +24Vdc / Option: +12 to +15 Vdc
Power Consumption	400 mA max.
Operating Temperature Range	-40 to +60 °C
Storage Temperature Range	-40 to +80 °C

<Outline Drawing>



Unit: mm



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