

The Unit (Low Noise Amplifier with Downconverter, a weatherized housing for outdoor use) downconverts K-band RF signal (19.2 to 20.2 GHz) to L-band IF signal and covers phase noise at K-band for DVB-S2 support with operation temperature of up to 73 °C.

### < Features >

- \* **Highly-stable internally referenced**  
LO Stability: +/- 3 ppm
- \* **Low Noise Figure**  
Noise Figure: 1.3 dB
- \* **High level block diagram**
- \* **Reliable All-weather Performance**



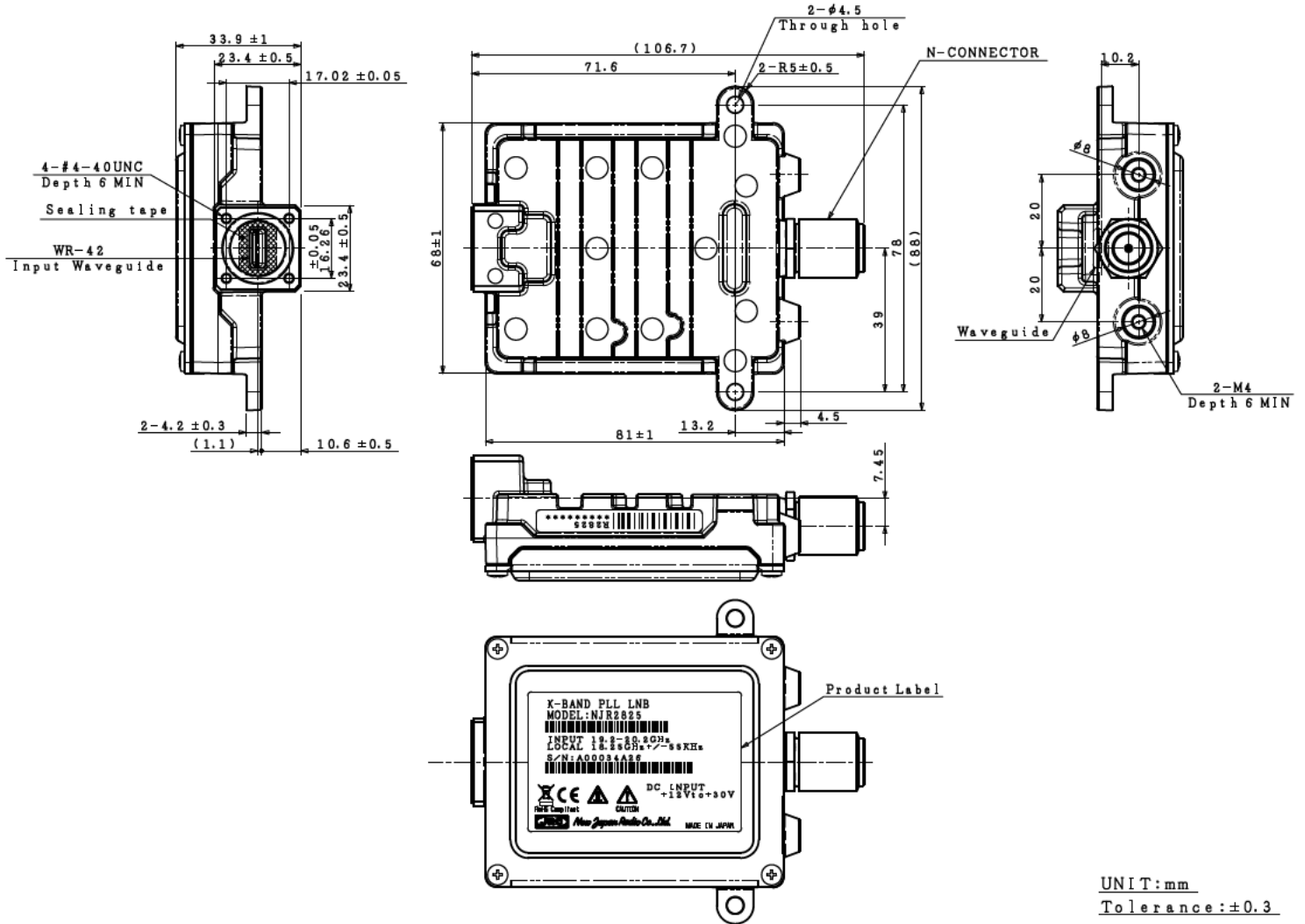
### < Line-up >

Model No.	RF Frequency	Local Frequency	IF Frequency	LO Stability	Noise Figure	Power Supply
NJR2825	19.200 to 20.200 GHz	18.250 GHz	950 to 1,950 MHz	+/- 3.0 ppm	1.3 dB	+12 to +30 V DC Power

### < Specifications >

Item	Specifications
Input Interface	Waveguide, WR42 with O-ring Groove
Output Interface	Coaxial Connector, N-type female connector (50 ohm)
Noise Figure	1.3 dB max. @ +25 °C 1.6 dB max. over all environmental conditions
Conversion Linear Gain	65 dB min., 75 dB max.
Power Output at 1dB G.C.P.	+10 dBm min.
The Third Order Intercept Point	+20 dBm min.
Integrated Phase Jitter (DSB)	2.0 degree RMS (1kHz – 1MHz)
Internal Reference Stability	Over temperature: +/- 3.0 ppm max.
Power Requirement	+12 to +30 DC Power
Power Consumption	4 W max.
Temperature	Operational Temperature: -40 to +73 °C Storage Temperature: -40 to +85 °C
Waterproofing (IP code)	IP65
Dimension & Housing	85 (L) x 68 mm (W) x 34 mm (H) [3.35" (L) x 2.68" (W) x 1.34" (H)] excluding connectors and mounting ears
Weight	0.4 kg [0.9 lbs]
MTBF	100,000 hours min. at +40 °C

< Outline Drawing >



UNIT: mm  
 Tolerance:  $\pm 0.3$

\*Note: The contents of this sheet are subject to change without notice.

Rev.01 GX K PLL LNB\_NJR2825