

MODEL No. NJT8304 series

< Features >

* RF Frequency Line-up

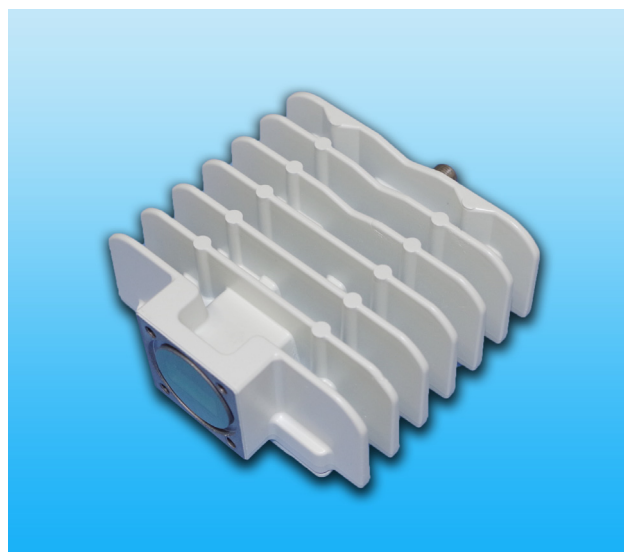
- Universal Ku-band: 13.75 to 14.5 GHz
- Standard Ku-band: 14.0 to 14.5 GHz

* High Efficiency Output Power

- P1dB: +36.0 dBm min. over temperature
- ACPR: -26 dBc @ Pout = +35.5 dBm
- Power Consumption: 28 W

* Smaller Size & Lighter Weight

- Dimension: 98 (L) × 98 (W) × 42.5 (H) mm
- Weight: 500 g



< Line-Up >

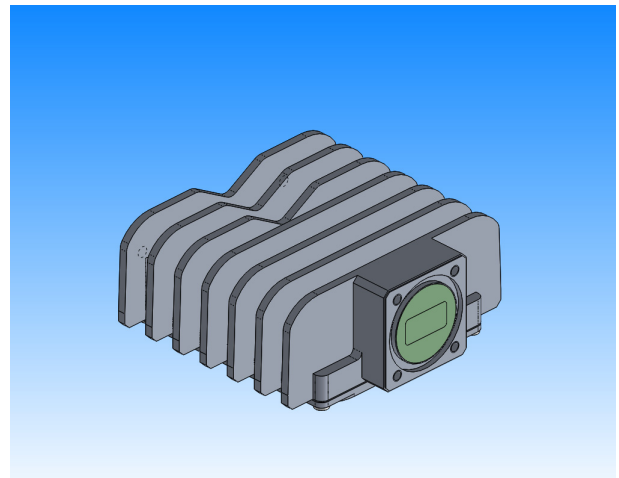
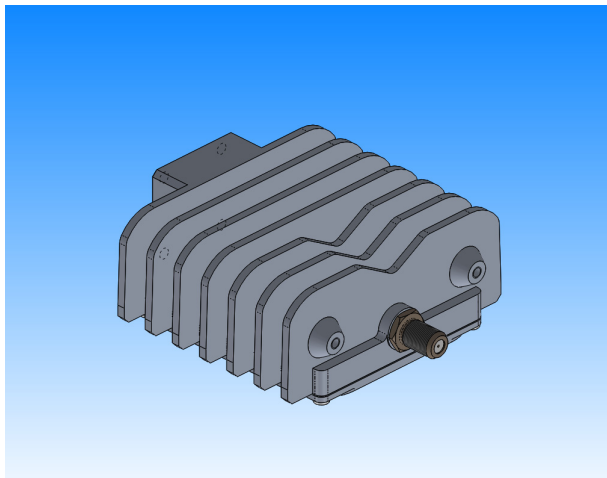
Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	Power Supply
NJT8304N	14.0 to 14.5GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz	4W Linear (+36.0dBm min.)	N-type	+12 to +30 V DC Power
NJT8304F					F-type	
NJT8304UN	13.75 to 14.5GHz (Universal Ku-band)	12.80 GHz	950 to 1,700 MHz		N-type	
NJT8304UF					F-type	

< Specifications >

Item	Specifications
Output Power @ 1dB G.C.P. (P1dB)	+36.0 dBm min. over temperature
Linear Gain	62 dB nom., 56 dB min.
Gain Variation over frequency <Universal Ku-band> <Standard Ku-band>	5 dBp-p max. over 750 MHz / 2 dBp-p max. over 54 MHz 5 dBp-p max. over 500 MHz / 2 dBp-p max. over 54 MHz
Gain Stability over temperature	2 dBp-p typ., 5 dBp-p max.
ACPR	-26 dBc min. @ Pout = +35.5 dBm
L.O. Phase Noise	-60 dBc/Hz max. @ 100 Hz -70 dBc/Hz max. @ 1 kHz -80 dBc/Hz max. @ 10 kHz -90 dBc/Hz max. @ 100 kHz -100 dBc/Hz max. @ 1 MHz
Input V.S.W.R.	2 : 1 max.
Output VSWR	2 : 1 max.
Output Load VSWR for Non Damage	Infinite : 1
Power Requirement (1) Voltage Range (2) Power Consumption @ P1dB	+12 to +30 V DC Power 24 W typ. @ No IF signal 28 W typ., 32 W max. @ Pout = +36 dBm 2 W max. @ 10 MHz reference off (Mute on)
Mute	Shut off the HPA in case of L.O. unlocked or no 10 MHz reference signal
Temperature Range (ambient)	Operating: -40 to +60 °C / Storage: -40 to +75 °C
Dimension & Housing	98 (L) × 98 (W) × 42.5 (H) mm without interface connector and screws
Weight	500 g

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

< **Outline** >



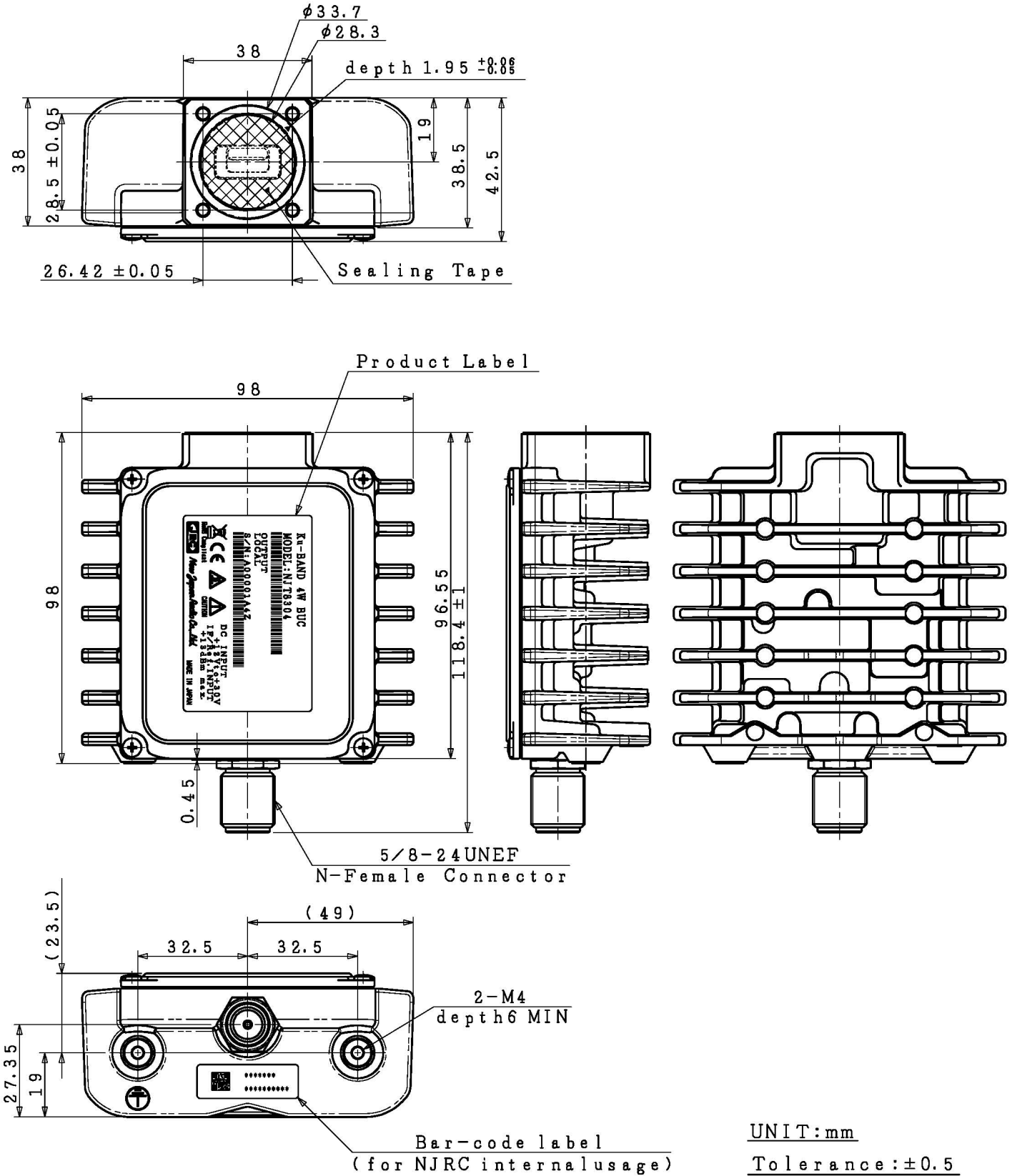
< **Comparison** >

	NJT5207 series (Current Model)	NJT8304 series (New Model)
RF Frequency	13.75 to 14.5 GHz	
Local Frequency	12.8 GHz	
IF Frequency	950 to 1,700 MHz	
Output Power @ 1dB G.C.P.	+36.0 dBm min. over temp.	
ACPR	-26 dBc typ., -23 dBc max. @Pout=+35 dBm	29 dBc typ., 26 dBc min. <i>Improvement @Pout=+35.5 dBm</i>
Linear Gain	62 dB nom., 56 dB min.	
DC Power Requirement	+24 V (+15 to +30 V)	+24 V (+12 to +30 V)
Power Consumption		<i>14% Reduction</i>
@ P1dB	37 W max.	28 W typ., 32 W max.
@ No IF, +25 C	-	24 W max.
@ 10 MHz reference off	-	2 W max.
Dimensions (L)	175.9 mm [6.92"]	<i>71% Reduction</i> 98 mm [3.86"]
(W)	143 mm [5.63"]	98 mm [3.86"]
(H)	56.5 mm [2.22"]	<i>71% Reduction</i> 42.5 mm [1.67"]
Weight	1.7 kg [3.7 lbs]	0.5 kg [1.1 lbs]
Temperature Range [Operating]	-40 to +55 °C	<i>5°C Range Up</i> -40 to +60 °C

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< Outline Drawing >

N-type, female Connector Model / DC Input: IF Connector



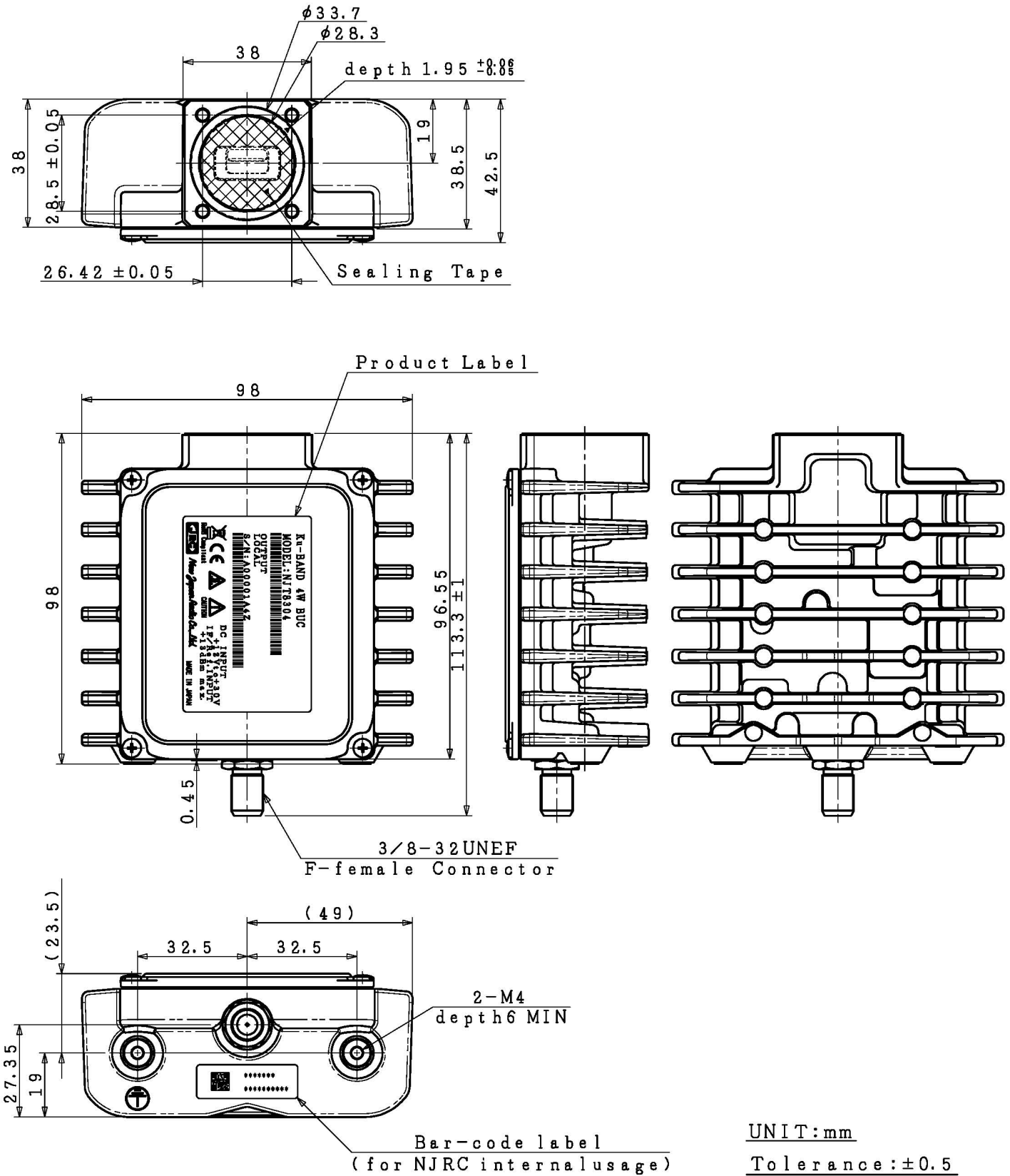
UNIT: mm

Tolerance: ± 0.5

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< **Outline Drawing** >

F-type, female Connector Model / DC Input: IF Connector



UNIT: mm

Tolerance: ± 0.5

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