

Ku-band 4W Transmitter

Model No. NJT5025

Type 1(N-type Female Input Connector)

Model No. NJT5025F

Type 2(F-type Female Input Connector)

Specifications

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New Japan Radio Co., Ltd.

Microwave Components Division

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1. Electrical Specifications

1-1.	Output Frequency Range	14.0 to 14.5 GHz
1-2.	Input Frequency Range	950 to 1,450 MHz
1-3.	Conversion Type	Single, fixed L.O.
1-4.	L.O. Frequency	13.05 GHz
1-5.	Frequency Sense	Positive
1-6.	Output Power @ 1dB G.C.P.	+36 dBm min.
1-7.	Linear Gain	55 dB nom. 50 dB min.
1-8.	Gain Stability over temperature @ fixed frequency	2 dBp-p typ. 5 dBp-p max.
1-9.	Gain Variation over frequency @ fixed temperature	5 dBp-p max. over 500 MHz 2 dBp-p max. over 36 MHz
1-10.	Requirement for External Reference [Frequency] [Input Power] [Phase Noise]	10 MHz (sine-wave) ----- -5 to +5 dBm @ Input port ----- -135 dBc/Hz max. @ 100 Hz -140 dBc/Hz max. @ 1 kHz -143 dBc/Hz max. @ 10 kHz -143 dBc/Hz max. @ 100 kHz
1-11.	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
1-12.	Spurious	-50 dBc max. @ 14.0 to 14.5 GHz -70 dBm max. @ 10.95 to 12.75 GHz
1-13.	Receive Band Noise Power	-110 dBm/50kHz max. @10.95 to 12.75 GHz
1-14.	Input Impedance	50 ohms nom. [Model No. NJT5025] 75 ohms nom. [Model No. NJT5025F]
1-15.	Input V.S.W.R.	2 : 1 max.
1-16.	Output V.S.W.R.	2 : 1 max.
1-17.	Output Load VSWR for Non Damage	Infinite : 1
1-18.	DC Power Requirement	+15 to +24 VDC 52.5 W max.
1-19.	Mute	Shut off the HPA in case of L.O. unlocked

2. Mechanical Specifications

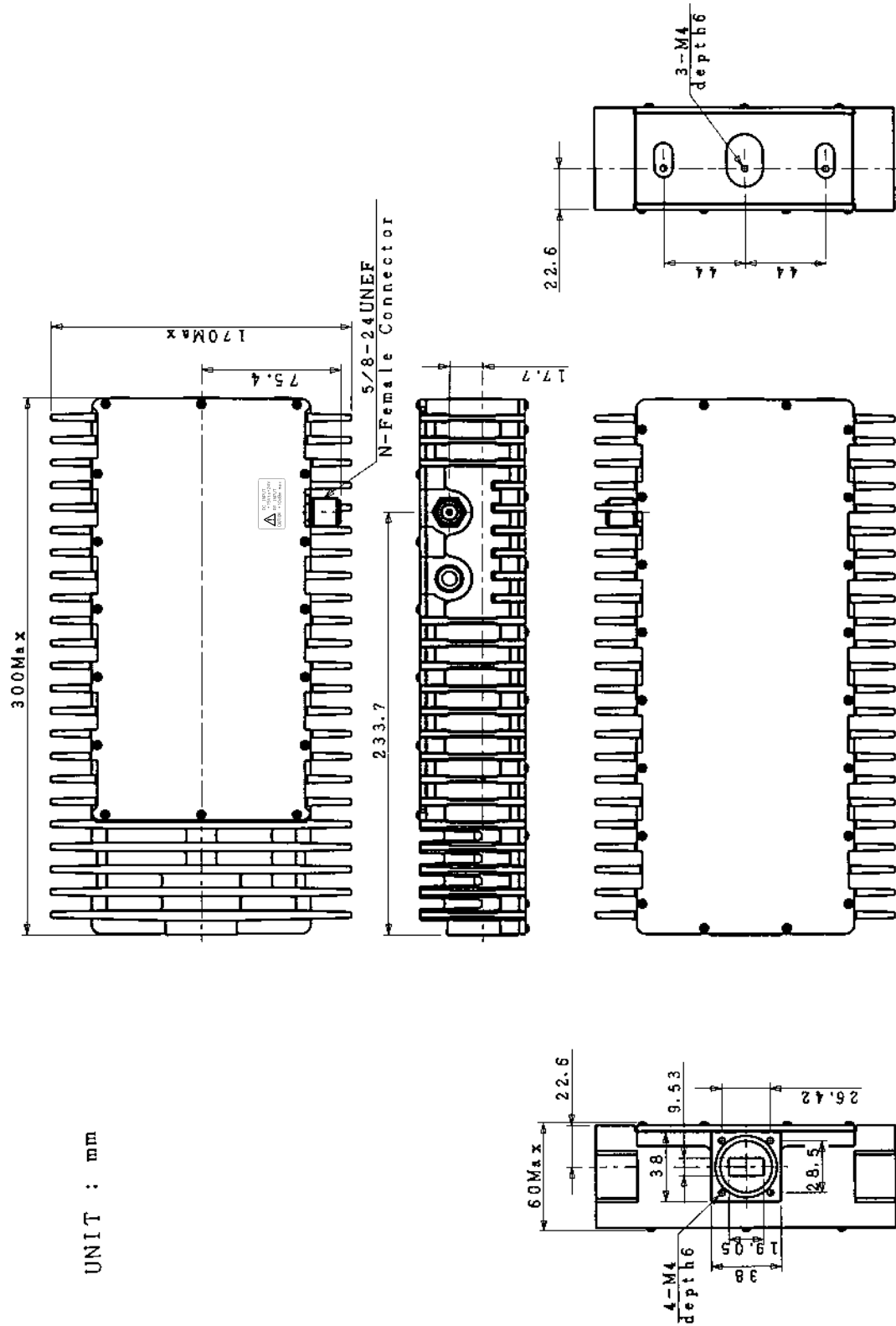
2-1.	Input Interface	N-type, female (50 ohms) [Model No. NJT5025] F-type, female (75 ohms) [Model No. NJT5025F]
2-2.	Output Interface	Waveguide, WR-75
2-3.	Dimension & Housing	Attached drawing
2-4.	Weight	3.5 kg max.
2-5.	Vibration	5 G (3 axis, 50 Hz to 2 kHz) 1 mm p-p (3 axis, 5 to 50 Hz)
2-6.	Shock	30 G (3 axis)

3. Environmental Specifications

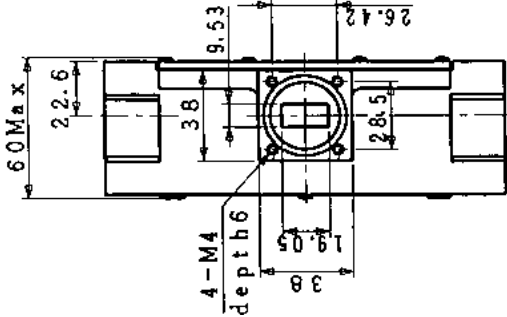
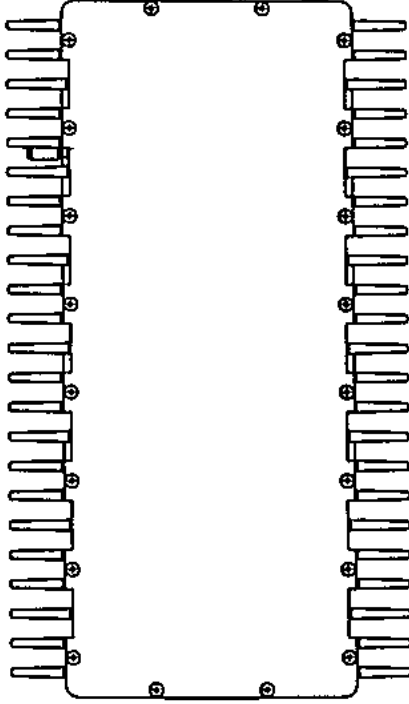
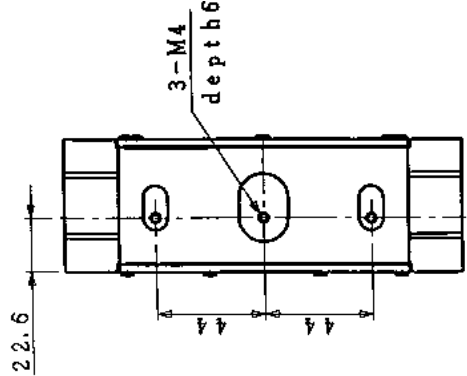
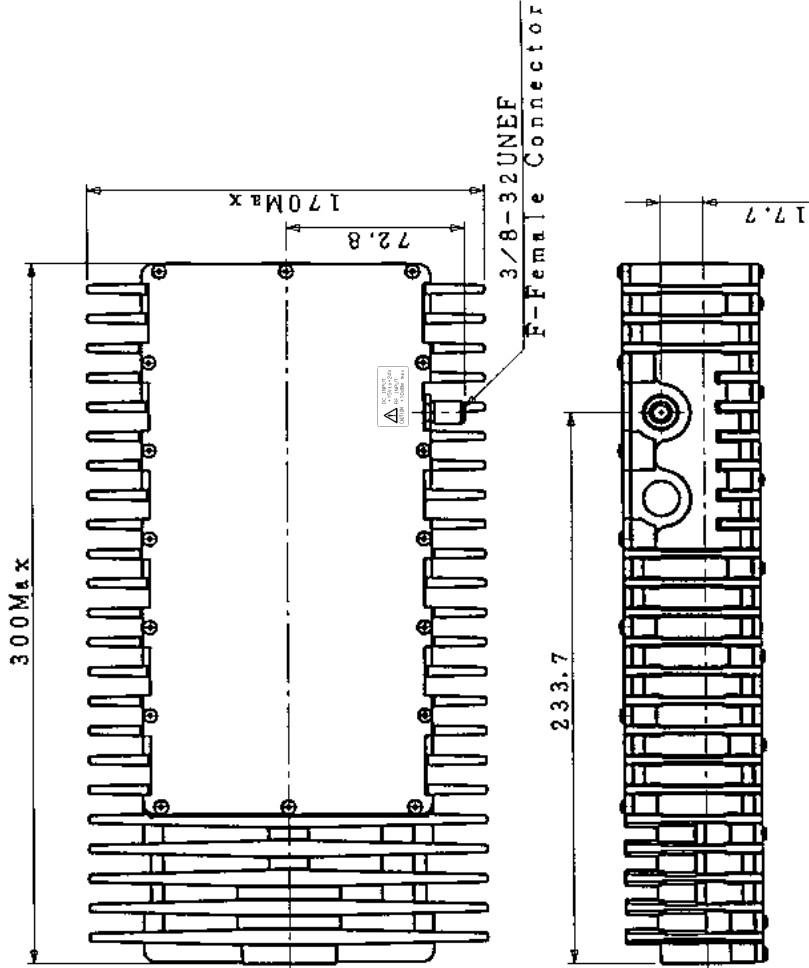
3-1.	Temperature Range (ambient)	-40 to +55 C (operating) -40 to +75 C (storage)
3-2.	Humidity	0 to 100 %
3-3.	Altitude	0 to 10,000 feet

4. Outline Drawing

Model No. NJT5025 (Type 1: N-type Female Input Connector)



Model No. NJT5025F (Type 2: F-type Female Input Connector)



UNIT : mm