

# C-band 5W Transmitter

Model No. NJT5669

Type1 (N-type Female Input Connector)

Model No. NJT5669F

Type2 (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	5.850 to 6.425 GHz
1-2.	Input Frequency Range	950 to 1,525 MHz
1-3.	Conversion Type	Single, fixed L.O.
1-4.	L.O. Frequency	4.90 GHz
1-5.	Frequency Sense	Positive
1-6.	Output Power @ 1dB G.C.P.	+37 dBm min. over temp.
1-7.	Linear Gain	61 dB nominal
1-8.	Gain Variation over frequency @ fixed temperature	5.5 dBp-p max. over 575 MHz 2 dBp-p max. over 36 MHz
1-9.	Gain Stability over temperature @ fixed frequency	5 dBp-p max.
1-10.	Requirement for External Reference	[Frequency] 10 MHz (sine-wave) [Input Power] -5 to +5 dBm @ Input port [Phase Noise] -120 dBc/Hz max. @ 100 Hz -130 dBc/Hz max. @ 1 kHz -140 dBc/Hz max. @ 10 kHz -150 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	[In-band] -50 dBc max. @ 5.850 to 6.425 GHz [Receive band] -70 dBm max. @ 3.625 to 4.200 GHz
1-13.	Receive Band Noise Power	-87 dBm/4kHz max. @ 3.625 to 4.200 GHz
1-14.	Input Impedance	50 ohms nom. [Model No. NJT5669] 75 ohms nom. [Model No. NJT5669F]
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 +30 VDC 55 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. NJT5669] F-type, female (75 ohms) [Model. No. NJT5669F]
2-2.	Output Interface	Waveguide, CPR137-G (Grooved) with Flange
2-3.	Dimension & Housing	[Model No. NJT5669] 190.6 mm (L) x 167.1 mm (W) x 59 mm (H) [7.50" (L) x 6.58" (W) x 2.32" (H)] [Model. No. NJT5669F] 190.6 mm (L) x 162 mm (W) x 59 mm (H) [7.50" (L) x 6.38" (W) x 2.32" (H)]
2-4.	Weight	2.54 kg max. [5.6 lbs]
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)

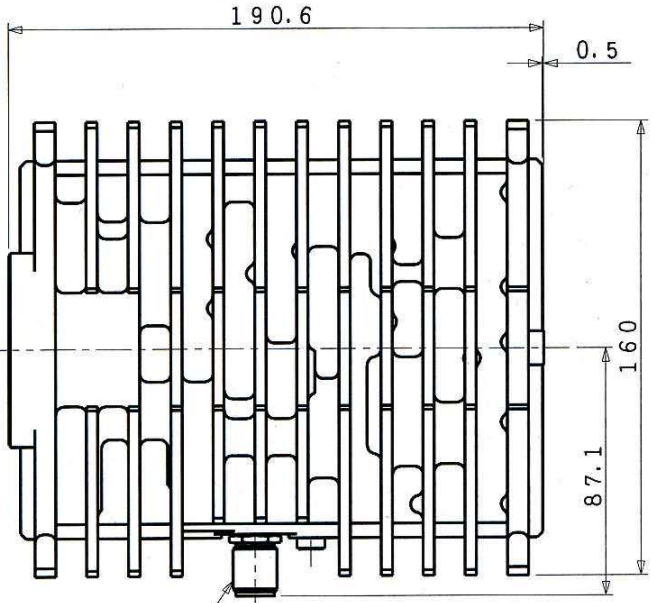
## 3. Environmental Specifications

3-1.	Temperature Range (ambient)	-40 to +55 C (operating) -40 to +75 C (storage)
3-2.	Humidity	0 to 100 %
3-3.	Altitude	15,000 feet

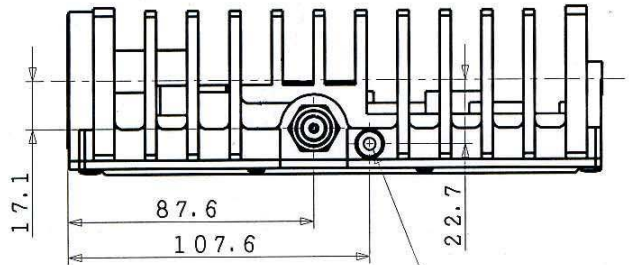
#### 4. Outline Drawing

Type 1 (N-type Female Input Connector) : Model No. NJT5669

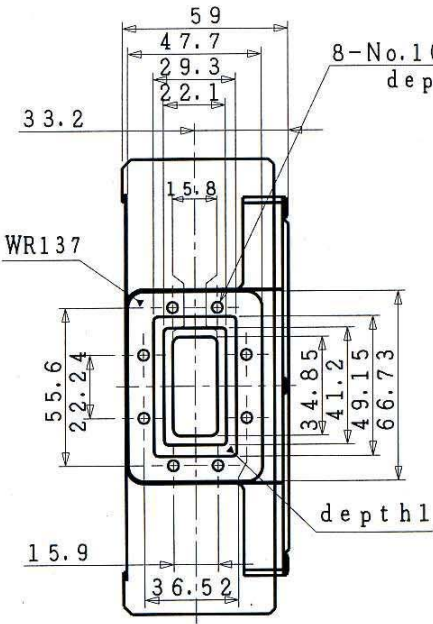
PRELIMINARY



N-Female Connector  
5/8-24UNEF

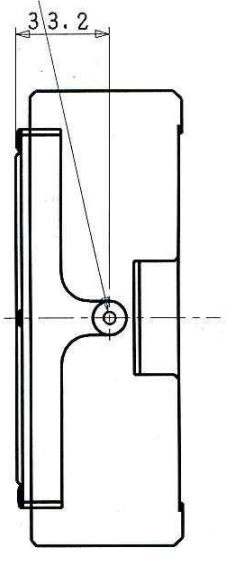
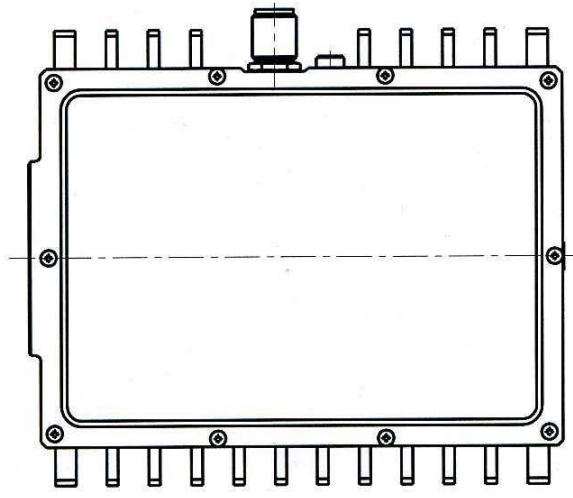


Grounded hole  
No.10-32UNF  
depth 6



8-No.10-32UNF  
depth 6

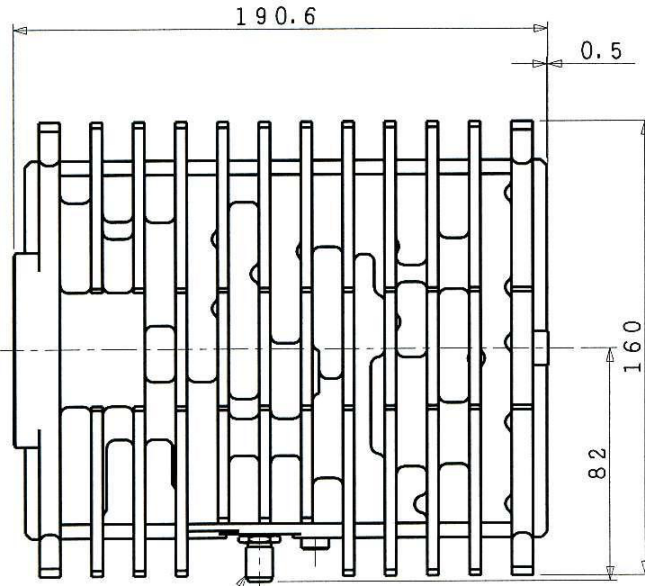
No.10-32UNF  
depth 6



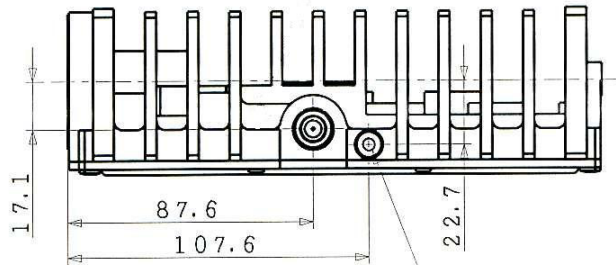
Unit : mm

Type 2 (F-type Female Input Connector) : Model No. NJT5669F

**PRELIMINARY**

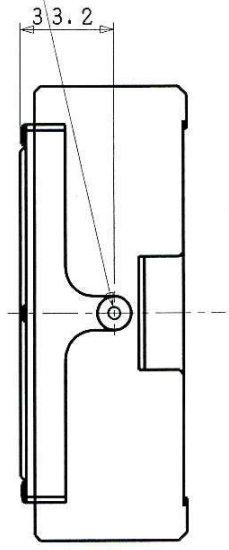
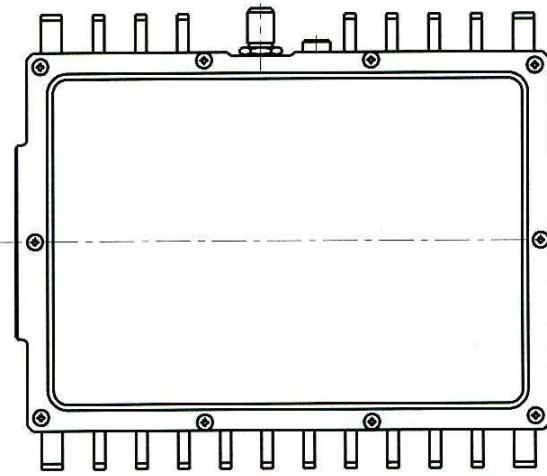
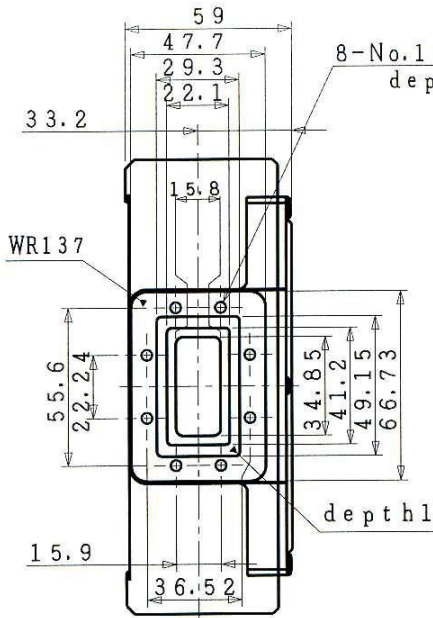


F-Female Connector  
3/8-32UNEF



Grounded hole  
No.10-32UNF  
depth 6

No.10-32UNF  
depth 6



Unit : mm