

# **Full C-band 10W BUC**

RF Frequency: 5.85 to 6.725 GHz

Model No. NJT5763F

IF / Ref. (10MHz) / DC Power Input: F-type Female Connector

## **Specifications**

Rev.00 Draft 02 July 18, 2012

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Microwave Components Division

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### 1. Electrical Specifications

1-1.	Output Frequency Range	5.850 to 6.725 GHz
1-2.	Input Frequency Range	950 to 1,825 MHz
1-3.	Maximum IF Input Level (without damage)	+13 dBm max.
1-4.	Conversion Type	Single, fixed L.O.
1-5.	L.O. Frequency	4.90 GHz
1-6.	Frequency Sense	Positive
1-7.	Output Power @ 1dB G.C.P.	+40 dBm min. over temperature
1-8.	Linear Gain	64 dB nom., 58 dB min.
1-9.	Gain Variation over frequency @ fixed temperature	5.5 dBp-p max. over 875 MHz 2.5 dBp-p max. over 54 MHz
1-10.	Gain Stability over temperature @ fixed frequency	4 dBp-p max. 2 dBp-p typ.
1-11.	IM3	-24 dBc typ. @ total power <= +40 dBm - 3 dB T.B.D.
1-12.	Requirement for External Reference [Frequency] [Input Power] [Phase Noise]	10 MHz (sine-wave) -5 to +5 dBm @ Input port -125 dBc/Hz max. @ 100 Hz -135 dBc/Hz max. @ 1 kHz -140 dBc/Hz max. @ 10 kHz
1-13.	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. @ 1MHz
1-14.	Spurious *note [in band] [in receive and] [Out-of-band]	-50 dBc max. @ 5.850 to 6.425 GHz -70 dBm max. @ 3.625 to 4.200 GHz -50 dBc max. @ Pout = +40 dBm
1-15.	Receive Band Noise Density	-87 dBm/4kHz max. @3.625 to 4.200 GHz
1-16.	Input Impedance	75 ohms nom.
1-17.	Input V.S.W.R.	2 : 1 max
1-18.	Output V.S.W.R.	2 : 1 max.
1-19.	Output Load VSWR for Non Damage	Infinite : 1
1-20.	DC Power Requirement [Voltage Range] [Power Consumption]	+24 / +48 VDC (+18 to +60 VDC) 85 W max. @ Pout = +40 dBm T.B.D.
1-21.	Mute	Shut off the HPA in case of L.O. unlocked or no 10 MHz reference signal.
1-22.	LED Indicator	GREEN: L.O. locked RED: L.O. unlocked (or no 10 MHz reference signal)

\*note: The 2<sup>nd</sup> harmonics level of IF signal should be lower than -60dBc at the IDU and IF signal source output

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## 2. Mechanical Specifications

2-1.	Input Interface [IF / Ref./DC Power]	F-type, female
2-2.	Output Interface	Waveguide, CPR-137 with Groove
2-3.	Dimension & Housing	219.5 (L) x 175 (W) x 99 (H) mm [8.64" (L) x 6.89" (W) x 3.90" (H)]
2-4.	Weight	3.2 kg typ., 3.3 kg max. [7.0 lbs typ., 7.3 lbs max.]

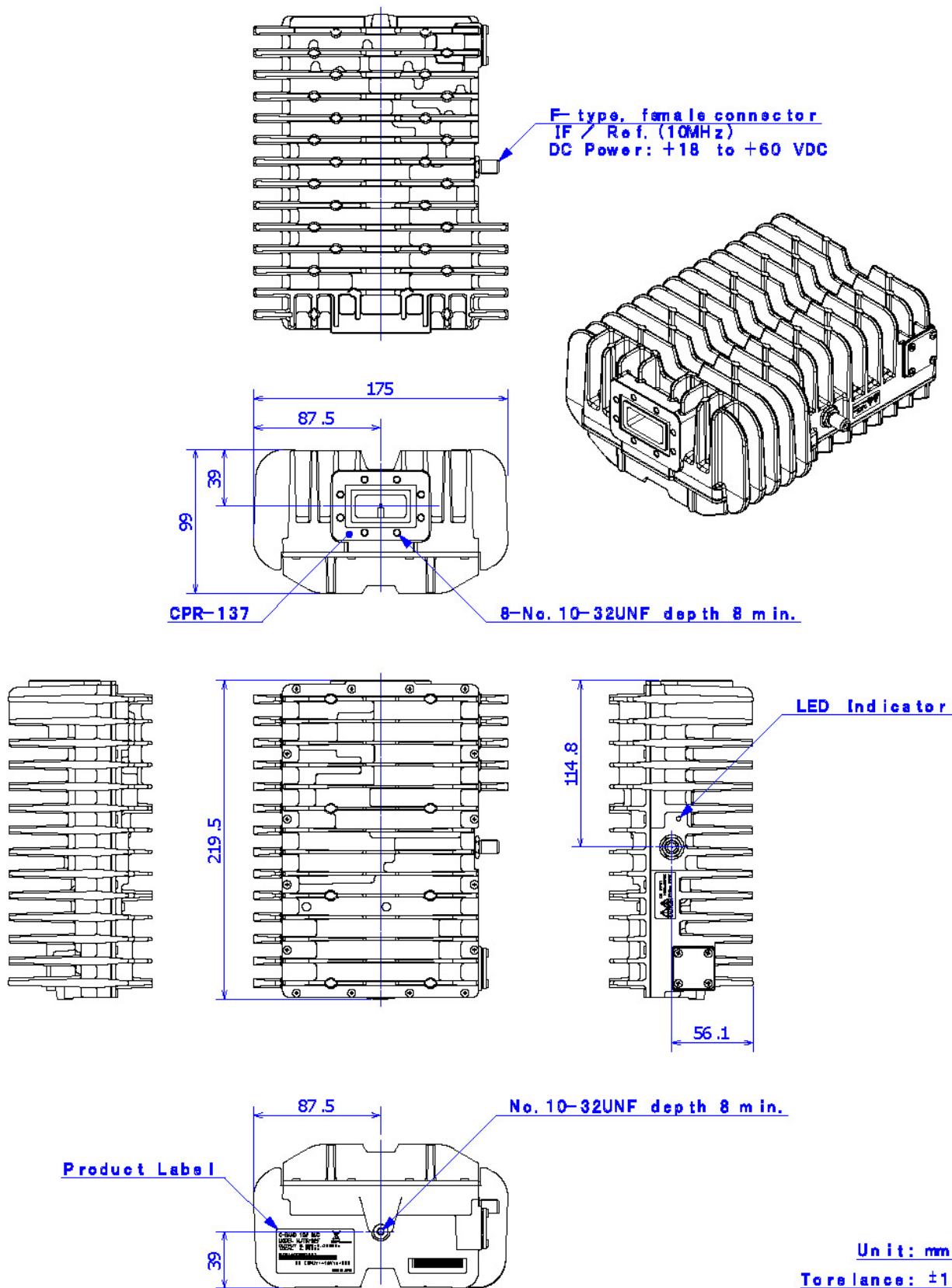
## 3. Environmental Specifications

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
3-4.	Vibration	5 G [49.03 m/s <sup>2</sup> ] (3 axis, 50 Hz to 2 kHz) 1 mm p-p (3 axis, 5 to 50 Hz)
3-5.	Shock	30 G [294.20 m/s <sup>2</sup> ] (3 axis)
3-6.	Comply with RoHS (Restricting the use of Hazardous Substances) directives	

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**- Preliminary -**

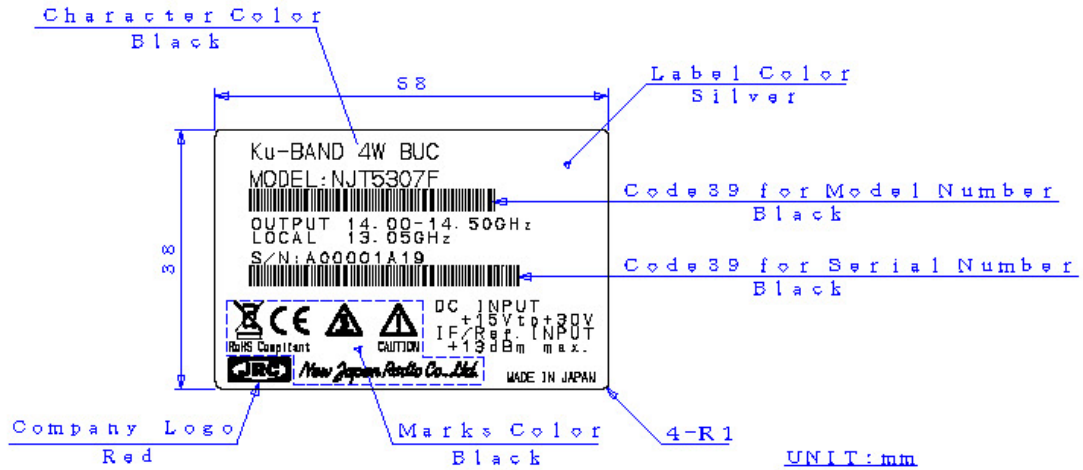
**4. Outline Drawing**



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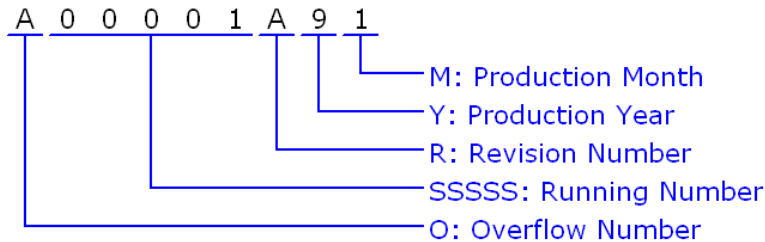
## 5. Label

### Product Label



### Definition of Serial Number

Serial Number (OSSSSRYM) - ALPHANUMERIC (9 characters)



O: Overflow Number - ALPHABET (1 character)

"A" to "Z", e.g.: A99999 ⇒ B00001

SSSSS: Running Number - NUMBER (5 digits)

"00001" to "99999"

R: Revision Number - ALPHABET (1 character)

"A" to "Z"

Y: Production Year - NUMBER (1 digit)

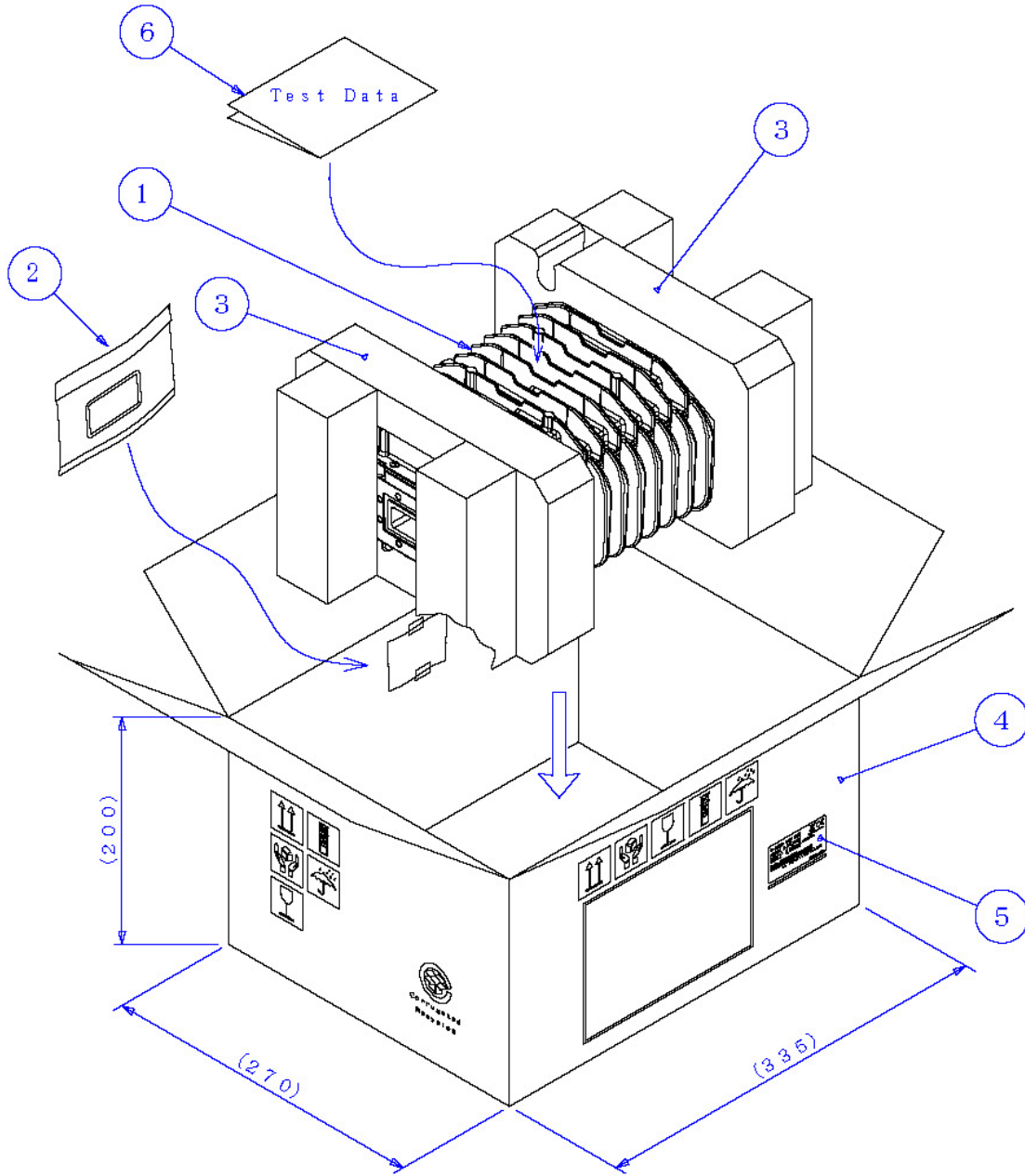
Calendar Number, e.g.: 2009:9, 2010:0, 2011:1, 2012:2 .....

M: Production Month - ALPHANUMERIC (1 character)

"1" to "9", "X" as October, "Y" as November, "Z" as December

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### 6. Package



UNIT : mm

- ① : BUC
- ② : Accessories  
• O-RING
- ③ : Polyethylene Foam For Package Cushioning
- ④ : Corrugated Fibreboard (Double Wall)
- ⑤ : Label
- ⑥ : Test Data

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