

# Ku-band 3W BUC

## MODEL No. NJT5116 series

### < Features >

- \* **High Efficiency Output Power**
  - P1dB: +34.5 dBm min. @ +25 C
  - +34.0 dBm min. over temperature
  - Power Consumption: 31 W
- \* **Low Distortion (ACPR):**
  - ACPR: -26 dBc max. @ Pout = +33.5 dBm
- \* **Small Size & Light Weight**
  - Weight: 1.2 kg
- \* **RoHS Compliance**



### < Line-Up >

| Model No. | RF Frequency                           | Local Frequency | IF Frequency        | Output Power @ P1dB         | IF Connector | Power Supply     |
|-----------|--|-----------------|---------------------|-----------------------------|--------------|------------------|
| NJT5116N  | 14.0 to 14.5 GHz<br>(Standard Ku-band) | 13.05 GHz       | 950 to<br>1,450 MHz | 3W Linear<br>(+34 dBm min.) | N-type       | +24 VDC          |
| NJT5116F  |  |                 |                     |                             | F-type       | (+15 to +30 VDC) |

### < Specifications >

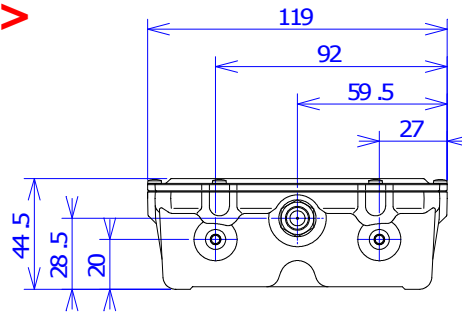
| Item  | Specifications  |
|---|---|
| Output Interface  | Waveguide, WR75 (with Groove)   |
| Input Interface   | N-type, female (50 ohm) [Model No.: NJT5116N]<br>F-type, female (75 ohm) [Model No.: NJT5116F]  |
| Output Power @ 1 dB G.C.P.                              | +34.5 dBm min. @ +25 C<br>+34.0 dBm min. over temperature   |
| Linear Gain   | 55 dB typ., 51 dB min.  |
| ACPR Compliance with IESS308 / SSOG                     | -26 dBc max. @ Pout = +33.5 dBm   |
| Requirement for External Reference                      | [Frequency] 10 MHz (sine-wave)<br>[Input Power] -5 to +5 dBm @ Input port<br>[Phase Noise] -125 dBc/Hz max. @ 100 Hz<br>-135 dBc/Hz max. @ 1 kHz<br>-140 dBc/Hz max. @ 10 kHz |
| L.O. Phase Noise  | -60 dBc/Hz max. @ 100 Hz<br>-70 dBc/Hz max. @ 1 kHz<br>-80 dBc/Hz max. @ 10 kHz<br>-90 dBc/Hz max. @ 100 kHz  |
| Receive Band Noise Density                              | -110 dBm/50kHz max. @10.95 to 12.75 GHz   |
| Input V.S.W.R.  | 2.0 : 1 max.  |
| Output V.S.W.R.   | 2.0 : 1 max.  |
| Power Requirement                                       | +24 VDC (+15 to +30 VDC)  |
| Power Consumption                                       | 31 W max.   |
| Mute  | Shut off the HPA in case of L.O. unlocked or no 10 MHz reference signal.  |
| Temperature Range (ambient)                             | -40 to +55 C (operating), -40 to +75 C (storage)  |
| Dimension & Housing<br>( without Interface Connectors ) | 172.9 mm (L) x 119 mm (W) x 44.5 mm (H)<br>[6.81" (L) x 4.69" (W) x 1.75" (H)]  |
| Weight  | 1.2 kg [2.6 lbs]  |

■ Ku-band 3W BUC

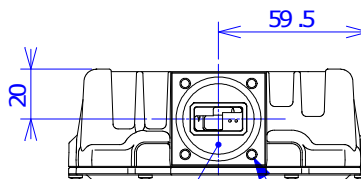
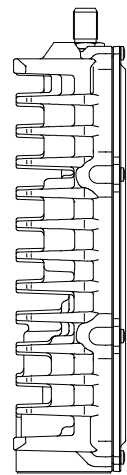
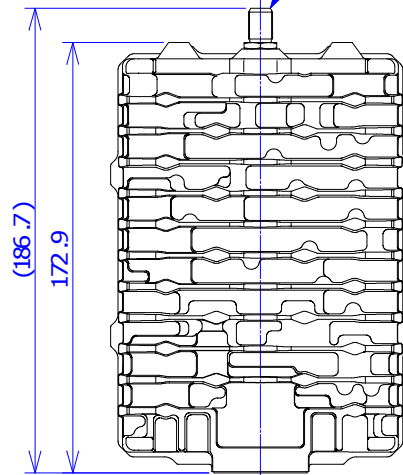
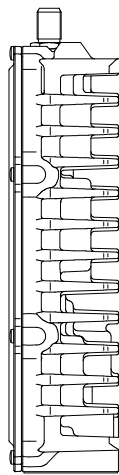
MODEL No. **NJT5116** series

< Outline Drawing >

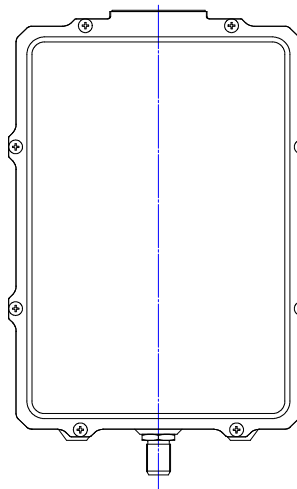
**NJT5116F**



F-type, female connector  
 IF / Ref. (10MHz)  
 DC Power: +15 to +30 VDC



WR-75      4-M4 depth 6 min.



Unit: mm