

# Ku-band 8W BUC

MODEL No. **NJT5118** series

## < Features >

- \* **High Efficiency & Low Distortion**
  - P1dB: +39 dBm min. over temperature
  - IM3: -28 dBc @ Pout = +36 dBm
  - Power Consumption: 79 W
- \* **Wide Operating Range of DC Power Operation**
  - Voltage Range: +18 to +60 VDC
- \* **Compact Size & Light Weight**
  - Weight: 3.2 kg
- \* **LED Indicator**
- \* **RoHS Compliance**



## < Line-Up >

Model No.	RF Frequency	Local Frequency	IF Frequency	Output Power @ P1dB	IF Connector	Power Supply	Port for Voltage Input	LED Indicator
NJT5118N	14.0 to 14.5 GHz (Standard Ku-band)	13.05 GHz	950 to 1,450 MHz	8W Linear (+39 dBm min.)	N-type	+24 / +48 VDC (+18 to +60 VDC)	Same as IF Connector MS Connector (Separate Port)	Equipped
NJT5118F					F-type			
NJT5118NM					N-type			
NJT5118FM					F-type			

## < Specifications >

Item	Specifications
Output Interface	Waveguide, WR75 (with Groove)
Input Interface	N-type, female (50 ohm) [Model No.: NJT5118N/18NM] F-type, female (75 ohm) [Model No.: NJT5118F/18FM]
Output Power @ 1 dB G.C.P.	+39 dBm min. over temperature
Linear Gain	65 dB nom., 59 dB min.
IM3	-28 dBc typ. @ total power = +39 dBm - 3 dB
Requirement for External Reference	[Frequency] 10 MHz (sine-wave)
	[Input Power] -5 to +5 dBm @ Input port
	[Phase Noise] -125 dBc/Hz max. @ 100 Hz -135 dBc/Hz max. @ 1 kHz -140 dBc/Hz max. @ 10 kHz
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
Receive Band Noise Density	-156 dBm/Hz 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 / +48 VDC (+18 to +60 VDC)
Power Consumption	79 W typ., 90 W max.
Mute	Shut off the HPA in case of L.O. unlocked or no 10 MHz reference signal.
LED Indicator	GREEN: L.O. locked / RED: L.O. unlocked or no 10 MHz reference signal
Port for Voltage Input	Same as IF Connector [Model No.: NJT5118N/18F]
	MS Connector (Separate Port) [Model No.: NJT5118NM/18FM]
Temperature Range (ambient)	-40 to +55 C (operating), -40 to +75 C (storage)
Dimension & Housing ( without Interface Connectors )	219.5 mm (L) x 175 mm (W) x 99 mm (H)
	[8.64" (L) x 6.89" (W) x 3.90" (H)]
Weight	3.2 kg [7.0 lbs]