

Ku-band 16W BUC

Model No. NJT8319 series

RF Frequency : 14.0 to 14.5 GHz / 13.75 to 14.5 GHz

LO Frequency : 13.05 GHz / 12.80 GHz

IF Frequency : 950 to 1,450 MHz / 950 to 1,700 MHz

Output Power @ 1dB G.C.P.

: +42 dBm (16W)

IF / Ref. (10MHz) Input:

N-type / F-type, Female Connector

DC Power Input : MS Connector / IF Connector (*)

M&C Option : FSK Communication M&C

RS-232C Interface M&C

Specifications

Rev.03 August 26, 2016

*) MS Connector models are available to apply DC voltage via either MS Connector or IF Connector.

Specifications are subject to change without notice. 4 Rev.03_Aug.26,2016_NJT8319

1. Electrical Specifications 1-1.	Output Frequency Range <Universal Ku-band>	13.75 to 14.5 GHz
1-2.	Input Frequency Range <Universal Ku-band>	950 to 1,700 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 <Universal Ku-band> <Standard Ku-band>	12.80 GHz 13.05 GHz
1-6.	Frequency Sense	Positive
1-7.	Output Power @ 1dB G.C.P. (P1dB)	+42 dBm min. over temperature
1-8.	Linear Gain	68 dB nom., 62 dB min.
1-9.	Gain Variation over frequency @ fixed temperature <Universal Ku-band> <Standard Ku-band>	5 dBp-p max. over 750 MHz 2 dBp-p max. over 54 MHz 5 dBp-p max. over 500 MHz 2 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	-28 dBc typ., -24 dBc max.

		@ total power $\leq +42$ dBm - 3 dB
1-12.	ACPR	-28 dBc typ. @ Pout = +41 dBm
1-13.	Requirement for External Reference	10 MHz (sine-wave)
	[Frequency]	-5 to +5 dBm @ Input port
	[Input Power]	-125 dBc/Hz max. @ 100 Hz
	[Phase Noise]	-135 dBc/Hz max. @ 1 kHz
1-14.	L.O. Phase Noise	-140 dBc/Hz max. @ 10 kHz
		-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
1-15.	Spurious @ P1dB Output	-50 dBc max. @ RF
	[in band]	Frequency
	[in receive and]	-70 dBm max. @ 10.95 to 12.75 GHz
	[Out-of-band]	-50 dBc max.
1-16.	Receive Band Noise Density	Tx: 14.0 to 14.5 GHz
	<Universal Ku-band>	-156 dBm/Hz max. @10.95 to 12.75 GHz
	<Standard Ku-band>	Tx: 13.75 to 14.0 GHz
		-156 dBm/Hz max. @10.95 to 12.25 GHz
		-125 dBm/Hz max. @12.25 to 12.75 GHz
		Tx: 14.0 to 14.5GHz
		-156 dBm/Hz max. @ 10.95 to 12.75 GHz