

Innovative Communication Solutions

BUC KA-BAND 50W ATOMBKA050



NORSAT ATOM SERIES BUCS

Compared to equivalent products, ATOM series BUCs are:

- Up to 20% smaller
- Up to 50% lighter
- · Internal isolation to provide reflected power protection

The Norsat ATOM series of block upconverters (BUC) are among the smallest, lightest, and most energy efficient transmitters available. The high efficiency of ATOM reduces power consumption significantly, delivering considerable operational cost savings over the lifetime of the device.

RF CONFIGURATIONS

Transmit Frequency

Military band Commercial band 1

Input Frequency

Military band Commercial band 1

* Custom within range

30.0 to 31.0 GHz 29.0 to 30.0 GHz

1 to 2 GHz 950 to 1950 MHz

OPTIONS

Baseplate Cooling

>

Surge Protect

Internal Reference

AC Power

Fanless opertation supporting

external cooling systems

1275D surge protection and

EMI filtering

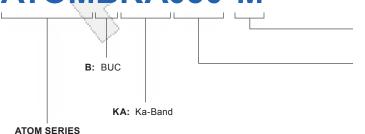
Internal reference with

auto-sensing

AC power supply

HOW TO ORDER

ATOMBKA050-M



Band

M- Military C- Commercial

Psat

025- 25W **050- 50W**

KA-BAND 50W BUC-ATOMBKA050

RF SPECIFICATIONS

 Output Power (Psat)
 47 dBm

 Output Power (Plin)
 > 44 dBm

Phase Noise -72 dBc/Hz at 100 Hz -72 dBc/Hz at 1 KHz

-82 dBc/Hz at 10 KHz -92 dBc/Hz at 100 KHz

-102 dBc/Hz at 1 MHz

Noise Figure 15 dB **Conversion Gain** 60 dB +/- 0.5 dB Gain Variation over 40MHz Gain Variation over 500 MHz +/- 1.5 dB Gain Variation over 1000 MHz +/- 2.0 dB Gain Variation over temperature +/- 2 dB Spurious in Band -60 dBc -30 dBc Spectral Regrowth @ Plin 3rd Order Intermod @ Plin -25 dBc

ENVIRONMENTAL & PHYSICAL

Operating Temperature -40 to +60°C (-40 to 140°F)

Storage Temperature -54 to +105°C (-65° to +221°F)

Outline Dimensions 188 x 114 x 171 mm (7.4 x 4.5 x 6.75 in)

Weight 4.3 kg (9.5 lbs)

Enclosed Accessories Screws, gasket, M&C mating connector, power mating connector

POWER

Input Voltage 20 - 56 VDC

AC Power Supply Option 95-265 VAC, 50/60 Hz

Power Consumption (DC) 570W @ P1dB 400W @ Plin

40W muted

Power Connector (DC) MIL-26482 Series 1

Power Connector (AC) TBD

INTERFACES

MONITOR & CONTROL

Discrete Mute Control Voltage ranges

Low 0 -0.8 V High 3.0 - 5.0 V Fully programmable Mute enable can be high or low

Mute default can be enabled or disabled

Thermal shutdown control threshold +85°C

Temperature Monitor Accuracy + 3°C

Temperature Monitor Accuracy ± 3 °C

Monitor/Control Connector MIL-26482 Series 1
Shell size 12, 10 pins

M&C Connector (Ethernet) R.

M&C Signaling RS-485 or Ethernet

MECHANICAL DIAGRAM

