

Innovative Communication Solutions

SSPAKA-BAND 25W ATOMSKA025



NORSAT ATOM SERIES SSPAS

Compared to equivalent products, ATOM series SSPAs are:

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

The Norsat ATOM series of solid state power amplifiers (SSPA) 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 Custom – Specified within Bandwidth 30.0 to 31.0 GHz 29.0 to 30.0 GHz

OPTIONS

The following items are standard:

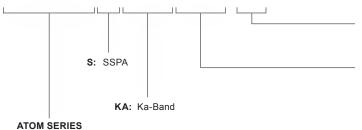
White paint, EMI/EMC Filter, Auto-Sensing Internal/External Reference, Low Voltage Operation, Fast Switching.

Available options include:

Baseplate Cooling, Ethernet M+C, 1275D Surge + Protect Filter.

HOW TO ORDER

ATOMSKA025-M



Band

M - Military C - Commercial

S - Specified Bandwidth

Psat

025- 25W

KA-BAND 25W SSPA-ATOMSKA025

RF SPECIFICATIONS

Output Power (Psat) 44 dBm > 41 dBm **Output Power (Plin)**

Phase Noise -66 dBc/Hz at 100 Hz -76 dBc/Hz at 1 KHz

-86 dBc/Hz at 10 KHz -96 dBc/Hz at 100 kHz

-106 dBc/Hz at 1 MHz

Noise Figure 15 dB **Conversion Gain** 50 dB typ.

Gain Variation over 40MHz +/- 0.5 dB Gain Variation over 500 MHz +/- 1.5 dB Gain Variation over 1000 MHz +/- 2.0 dB +/- 2 dB Gain Variation over temperature -55 dBc Spurious in Band

-30 dBc Spectral Regrowth @ Plin -25 dBc

3rd Order Intermod @ Plin

ENVIRONMENTAL & PHYSICAL

-40 to +60°C (-40° to +140°F) **Operating Temperature** -54 to +105°C (-65° to +221°F) Storage Temperature

Outline Dimensions 7.10 x 3.64 x 6.83" Weight 2.9 kg (6.3 lbs)

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

POWER

20 - 56 VDC Input Voltage **Power Consumption** 200W @ Psat 150W @ Plin

25W muted

Power Connector MIL-26482 Series 1 Shell size 12, 4 pins

MONITOR & CONTROL

Discrete Mute Control Voltage ranges

Mute enable can be high or low

0 - 0.8 V Low 3.0 - 5.0 V High Fully programmable

Mute default can be enabled or disabled

M&C Connector MIL-26482 Series 1 Shell size 12, 10 pins

M&C Signaling RS-485, RS-232 or Ethernet

INTERFACES

Input VSRW 1.5:1 **Output VSRW** 1.9:1 **RF Input Connector** 2.92 mm **RF Output Connector** WR-28

MECHANICAL DIAGRAM

