Solid State Power Amplifier 1000 to 2500 MHz, 250 Watts

Model BME19258-250

Overview

Stellant PST proudly introduces the highest power density solid state RF modules available in the marketplace today. Stellant's latest development expands on its proven innovative integrated RF GaN Power Amplifier designs by further increasing the RF power density, while improving overall operating efficiency. Consistent with its planned technology development roadmap, Stellant is leading the field with the latest in GaN-based RF device performance and advanced amplifier development. These highly integrated designs are ideal for use in communication, electronic warfare, and radar transmitter systems where space, cooling, and power are limited. Applications include ground (mobile or fixed), surface, and airborne platforms.



Features

- Highest Power Density to Footprint Ratio
- Ultra Wideband Operation
- Highest Efficiency Over the Entire Bandwidth
- Rugged and Reliable
- Extreme Temperature Range Usage

- RF Output Coupled Sample Port
- Internal DC to DC Converters
- Suitable Building Block for Rack Mounted Systems
- Maintains Output Power with Real-World Load Conditions

Performance Specifications

Frequency Range: 2000 to 6000 MHz

Saturated Power Output (Psat): 300 WattsOutput Power into 2.0:1 VSWR: 200 Watts Min

DE la cot Description 2.0.1 volvin. 200 voltes viiii

RF Input Range: -10 to 0dBm Typical
 RF input Overdrive: +10 dBm Max.

DC Bias:

AB Linear

Modulation Format: Multi-tone, CW, AM, FM,

Pulse

Input VSWR: 2.0:1 Max
 Output Load VSWR: 2.0:1 Typical
 Harmonic (In Band 2nd/3rd): <-20 dBc Typical
 IM Products (4 Tones): <-20 dBc Typical

IM Products (4 Tones): <-20 dBc Spurious: <-60 dBc

• Stability: Open/Short Tested

Built in Test: Composite Fault Indication

RS-422 (Over Temp, Over

Current)

Fwd./Rev. Sample Analog Voltage

Noise Power Output:

- Biased- Quieted- TodBm/Hz Typical- 150dBm/Hz Typical

RF In/RF Out Sample Ports:

• Control Interface: RS-422 SPI

PA Enable/Disable: Low Volt. TTL (<5μS) 3.3V

• DC Input:

DC Power @ 24V:

Efficiency (DC to RF):

Noise Power Output: -80dBm/Hz typical

RF Connectors:

RF Input and Sample Ports:

RF Input and Sample Ports
RF Output:

• Interface Connector:

Operating Temperature:

Environmental:

Size:

• Weight:

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25% Typical

18-32Vdc

1000W Typical

SMA (3X) TNC-Female

D-Subminiature

-40 to 85°C Baseplate (external

heatsink required)

Shock/Vibration MIL-STD- 810F

15" x 9" x 2.25"

14.5 lbs.

Power Systems Technology (PST)

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ISO 9001 CERTIFIED www.Stellantsystems.com



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