Power Systems Technology (PST)

Data Link Power Amplifier Module S & C-Band 50 Watts

Model BME2969-50DL

Overview

Stellant PST proudly introduces its latest development for the UAV Data Link market covering both S-Band and C-Band Transmit Links in a single wideband PA Module; further expanding its proven integrated RF GaN Power Amplifier product line. This model features a pre-flight safety low power Go/No-Go transmit mode for a final flight line confidence test as well as a battle short mode for mission critical stay on the air transmission. The PA module withstands and operates reliably in rugged and hostile environments. Combined with its smaller Size, Weight, and Power (SWaP) characteristics; this PA module is ideally suited for UAV Data Link transmission of digital telemetry and HD Video applications. Stellant is a stalwart leader for advanced amplifier development utilizing the latest in RF technologies for intelligence, surveillance and reconnaissance (ISR) missions. Our highly integrated products are also recommended for use in communication, EW, and radar systems where reliability is mission critical.



Features

- CDL Waveform Capable High Data Rates
- Ideally suited for UAV applications transmitting video, telemetry or other ISR functions
- Airborne and Ship Applications
- Linear Wide Bandwidth Performance (S-C Band)

- Rugged and Reliable into High VSWR Loads
- Go/No-Go Flight line Low Power Test Mode
- Optimal Size, Weight and Power (SWaP)

Performance Specifications

• Frequency Range: 2.2-2.5 & 4.4-5.85 GHz (2–6GHz)

RF Power Output: 50W (60 Watts Saturated)

RF Input: -6 dBm Typical
 RF input Overdrive: 20 dBm Max.

Modulation Format: Digital Format (QAM)

Input VSWR: 2.0:1 Max.

Output Load VSWR: 2.0:1 Full Power Output Typical
 Harmonic (2nd/3rd): <-14 dBc Typical (-12 dBc Max)

Spurious: <-55 dBc

• Stability: Open/Short all phase angles

Control Interface:

PA Enable (Blanking): TTL Logic

Summary Fault Output: TTL Logic (Over Temp &

Current)

Temperature Monitor (RS 232 Serial Data)
Forward/Reverse Detector (RS 232 Serial Data)
Battle Short Mode: (RS 232 Serial Data)
Low Power Mode: (RS 232 Serial Data)

DC Input: +28 VDC

(Other Voltages available)

DC Power @ 28V: 250W Max
Efficiency (DC to RF): 25% Typical
DC Bias: AB Linear
Noise Figure: 10 dB Typical

RF Input/Output Connectors: SMA

Control/DC Connector: D-Subminiature
 Operating Temperature: -40 to 85°C Baseplate (external heatsink required)

Environmental: Surface/Airborne

100% Condensing Humidity

Salt Fog

Size: 7.83" x 3.7" x 1.6"
Weight: 2.0 lbs. max.

Power Systems Technology (PST)

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