

2425-MEC-50W-DS

2400-2500MHz 47dBm Power Amplifier



The 2425-MEC-50W-DS is a 50 Watt (47dBm) high gain Solid State Narrowband Dual Channel Transmit/Receive (Tx/Rx) Module. This amplifier module utilizes the latest GaN based technology. Salient feature includes TTL control for enable / disable which make it suitable for airborne applications.



Product Features

47dBm Output at Psat

Modulations: CW, FM, AM, FSK, QPSK, OFDM

(Linear modulations with back-off power)

Single Supply Operation: Nominally 28V
Temperature Monitoring

| Symbol | Parameter | Unit | Min. | Typ. | Max. |
|--------|------------------------|------|------|------|------|
| BW | Operating Frequency | MHz | 2400 | | 2500 |
| PIN | RF Input | dBm | | 22 | |
| PSAT | Output Power Saturated | dbm | | ≥47 | |
| GF | Gain Flatness | dB | | ±1 | |
| VSWR | Input / Output VSWR | | 1.2 | 1.4 | 1.6 |
| NF | Rx Noise Figure | dB | | < 2 | |
| GTX | Tx Gain | dB | | ≥25 | |
| GRX | Rx Gain | dB | | ≥20 | |
| S11 | Input Return Loss | dB | | ≤-15 | |
| H | Humidity | % | 1 | | 100 |
| VDC | Operation Voltage | Volt | | 28.0 | |
| SWc | Tx / Rx Switching Time | sec | | <1μ | |
| C° | Operating Temperature | °C | -40 | 25 | +60 |

Electrical Specifications @ +28.0VDC, 25°C, 50Ω System

| Parameters | Value | Limit | Unit |
|-----------------------------|--|-------|------|
| Dimension (L x W x H) | 128 x 104.2 x 21 | - | mm |
| RF Connector Input / Output | SMA Female | - | - |
| DC Interface Connector | J30J Series Micro-D MIL-Spec Connector | - | - |

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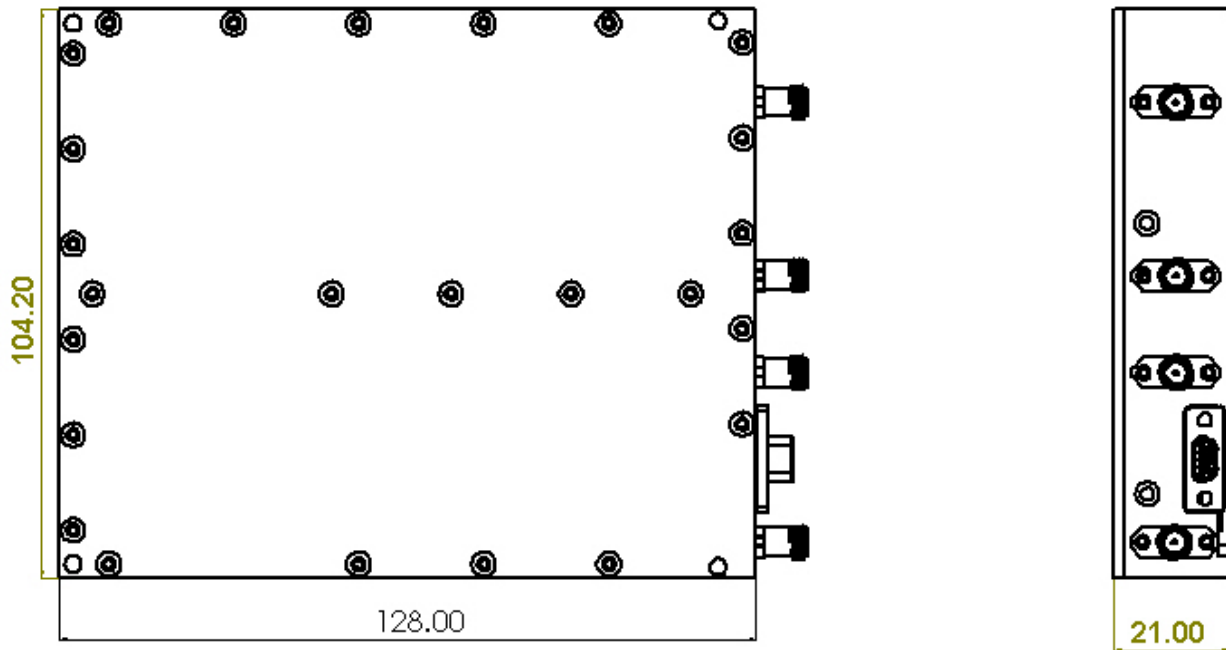
Protection & Monitoring Parameters

| Item | Specifications for Activation | Remark |
|--------------------|-------------------------------|---|
| TTL Enable/Disbale | Yes | TTL option available in Micro-D connector |

DC Interface (9pin Micro-D Connector)

| Pin No | Pin Description | Specifications | Remark |
|--------|---------------------|---|--------|
| 1-4 | VDD | +28VDC | |
| 6-8 | GND | GND | |
| 5 | Temperature Monitor | Available in micro-D connector | |
| 9 | TTL Enable/Disable | TTL option available in Micro-D connector | |

Mechanical Drawing



Note: All Dimensions are in mm.