

DESCRIPTION

This class A GaAs module is designed for both military and commercial applications. It is capable of supporting any signal type and modulation format, including but not limited to 3-4G telecom, WLAN, OFDM, DVB, and CW/AM/FM. The latest device technologies and design methods are employed to offer high power density, efficiency, and linearity in a small, lightweight package.



FEATURES

Over / Under / Reverse Voltage Protection
 Reflected Power Measurement
 Temperature Output

Forward Power Measurement
 High Speed On/Off Control
 Optional Heatsink

Specifications subject to change without notice. Typical performance at 12.0VDC at 25°C in a 50Ω system

| RF / ELECTRICAL | | | | |
|------------------------|------|------|------|------|
| PARAMETER | MIN | TYP | MAX | UNIT |
| Operating Frequency | 800 | | 900 | MHz |
| P1dB Power Output | 46.0 | 47.0 | | dBm |
| PSat Power Output | 47.0 | 47.0 | | dBm |
| Gain | 46.0 | 47.0 | v | dB |
| Gain Flatness | | 1.0 | 1.5 | dB |
| Linear Power | | 40.0 | | dBm |
| Input Return Loss | -16 | -18 | | dB |
| Operating Voltage | 11.0 | 12.0 | 13.0 | VDC |
| Current Draw | | 12.0 | 14.0 | A |
| Quiescent Current Draw | | 15.0 | | A |
| Switching Time | | 1.0 | 1.0 | μS |

| MECHANICAL | | |
|--------------------------------|--|------|
| PARAMETER | VALUE | UNIT |
| Dimensions (L x W x H) | 6x3.5x0.693 | in |
| RF Connectors (Input / Output) | SMA-F / SMA-F | -- |
| DC / Control Connector | 7W2 Male | -- |
| Cooling | Baseplate Conduction - Optional Heatsink Available | -- |
| Mounting | 4-40 Thru Holes | -- |
| Weight | 14 | oz |
| Weight with Heatsink | 24 | Oz |

ENVIRONMENTAL / PROTECTIONS

| PARAMETER | MIN | MAX | UNIT |
|----------------------------------|--------------------------------|-----|------|
| Operating Temp. (Housing Temp.) | -40 | 85 | °C |
| Storage Temp Range | -60 | 100 | °C |
| Humidity Range | 0-100 | | % |
| Altitude | 0-30,000 | | ft. |
| Shock / Vibration | MIL-STD-810 and equivalents | | -- |
| Max RF Input | 3.0 | | dBm |
| Load VSWR @ P1dB | Open / Short Output Protection | | -- |
| PA Baseplate Shutoff Temperature | 85 | | °C |

DC / CONTROL PINS

| PIN LABEL | NAME | DESCRIPTION |
|-----------|------------|---|
| A1 | GND | Ground |
| 2 | TEMP | Temp Monitor: Temp in DegC = (Vout - 0.5V) / 10 |
| 3 | Amp Enable | TTL On/Off Low=Enable, High=Disable |
| 4 | FWD | Forward Power Measurement |
| 5 | REV | Reflected Power Measurement |
| +VDC | +VDC | Supply Voltage - Range Specified in Datasheet |