

0.4-1GHz Broadband Power Amplifier

P/N: MZPA00401GA10W



■ Features

- Ultra Wide Band: 0.4-1GHz
- Gain: 40dB
- Output Power Psat: 40dBm
- Bias: Vd=28V;Id=3A

■ Applications

- Radar Systems
- Communication Systems
- Receivers Systems



■ Electrical Specifications +25°C

| Parameter | Min. | Typ. | Max. | Units |
|-----------------------------------|----------------------------------|------|-------|--------------|
| Frequency Range | 0.4-1 | | | GHz |
| Small Signal Gain | 40 | 46 | | dB |
| Gain Flatness | | | ± 2.0 | dB |
| Input VSWR | | | 2.0 | - |
| Saturated Output Power (Psat) | 40 | | | dBm |
| Input Power | | | 10 | dBm |
| Harmonics@10W | | -15 | | dBc |
| Spurious Signals | | -60 | | dBc |
| DC Current (Vcc=+28V) (@Pout=10W) | | 3 | | A |
| Impedance | 50 | | | Ω |
| Dimensions | 150*90*27 (5.9*3.6*1.1) | | | mm (inch) |
| DC Interface Connector | D-Sub 9-Pin, Male | | | |
| Input Output Connector | SMA-Female | | | |
| Cooling | External Heatsink (Not included) | | | |

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■ Environmental Conditions

| | | | |
|--------------------------------|--------------|------------------|---|
| Operational Temperature | -20°C~+60°C | Vibration | 25g rms (15 degree 2KHz) endurance, 1 hour per axis |
| Storage Temperature | -55°C~+125°C | Shock | 20G for 11msc half sin wave, 3 axis both directions |
| Executive Standard | MIL-STD-810G | Humidity | 100% RH at 35c, 95%RH at 40°C |

■ Absolute Maximum Ratings

| | |
|----------------------------|--|
| Supply Bias Voltage | +30V |
| RF INPUT POWER | 10dBm |
| Load VSWR@POUT=5W | ∞@all load phase & amplitude for duration of 30 minute; 3:1@all load phase & amplitude continuous |
| Thermal Overload | 85°C shutdown |



■ DC INTERFACE CONNECTOR

| | | |
|----------|-----------------|---|
| 1 | VDD | 28Vdc |
| 2 | VDD | 28Vdc |
| 3 | VDD | 28Vdc |
| 4 | GND | Ground |
| 5 | GND | Ground |
| 6 | GND | Ground |
| 7 | CURRENT MONITOR | Analog voltage relative to Idd@100mV per Ampere |
| 8 | TEMP SENSE | Analog voltage relative to Module Temperature @10mV/°C |
| 9 | ENABLE | Amplifier Disable: TTL Logic High (3.3V)(Internally Pulled-low) |

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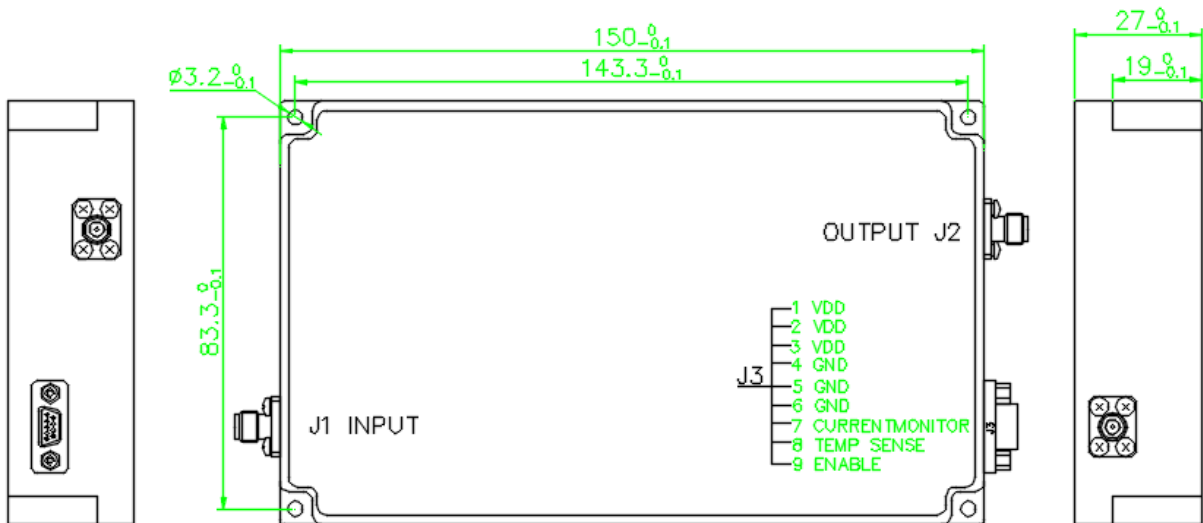
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■ Outline Drawing

All Dimensions in mm (inches) Tolerance ± 0.25 (0.01)



Heat Sink required during operation

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