

PA2060-100W- 2 to 6 GHz 100W SSPA Module

FEATURES

Class AB linear GaN design
Instantaneous wide bandwidth
Suitable for all single channel modulations standards
Smallest form factor & lightest weight
Built-in protection circuits
High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

| Parameter | Specification | Notes |
|------------------------------|-----------------|-------------------------------|
| Operating Frequency Range | 2.0 - 6.0 GHz | |
| Power Output | 100 Watt Min | |
| Power Output @ P1dB | 40 Watt Typ | CW |
| Power Gain | 50 dB Min | |
| Power Gain Flatness | 3.0 dB p-p Max | Constant input power |
| Input / Output Return Loss | 10 dB Min | Relative to 50 Ohm |
| 2-Tone Intermodulation (IMD) | -30 dBc Typ | 40 dBm/Tone, $\Delta = 1$ MHz |
| Harmonics | -20 dBc Typ | At rated Pout |
| Spurious | -60 dBc Max | Non-harmonics |
| Operating Voltage | 28 - 30 VDC | |
| Current Consumption | 24 Amp Max | At rated Pout |
| Max Input Power | +8 dBm | <10 Sec without damage |
| Load VSWR Protection | 5 : 1 | <1 minute at rated Pout |
| Turn On / Off Speed | 5 μ Sec Max | |

ENVIRONMENTAL CHARACTERISTICS

| Parameter | Specification | Notes |
|----------------------------|---------------|----------------|
| Operating Case Temperature | -20 to +75 °C | |
| Storage Temperature | -40 to +85 °C | |
| Relative Humidity | 5 to 95 % | Non-condensing |

MECHANICAL SPECIFICATIONS

| Parameter | Specification | Notes |
|--------------------------------|--------------------|----------------------|
| Dimensions | 285 x 125 x 27 mm | Excluding Connectors |
| Weight | 2.15 kg. | |
| RF Connectors In/Out | SMA female | |
| DC Power / Interface Connector | 7-Pin Hybrid D-Sub | |
| Cooling | External Heatsink | Forced air required |

D-SUB CONNECTOR PIN ASSIGNMENT

| Pin | Function | Description |
|-----|----------------|--|
| 1 | FWD | OPTION 101 - Forward power detect |
| 2 | VVA | OPTION 103 - Variable Voltage Attenuator |
| 3 | CURRENT SENSOR | I_D @20mV/100mA Typ |
| 4 | TEMP SENSOR | V_T @10mV/°C + 500mV Typ |
| 5 | SHUTDOWN | TTL |
| A1 | VDD | 28VDC |
| A2 | GND | Ground |

MtronPTI SSHPA Products: <http://www.mtronpti.com>

Applications

Test and Measurement

Electronic Warfare

Radar

Broadband Jamming

Public Safety

Quality & Certifications

AS9100 Rev C

ISO9001:2008

RoHS compliance

Conflict Minerals Compliant

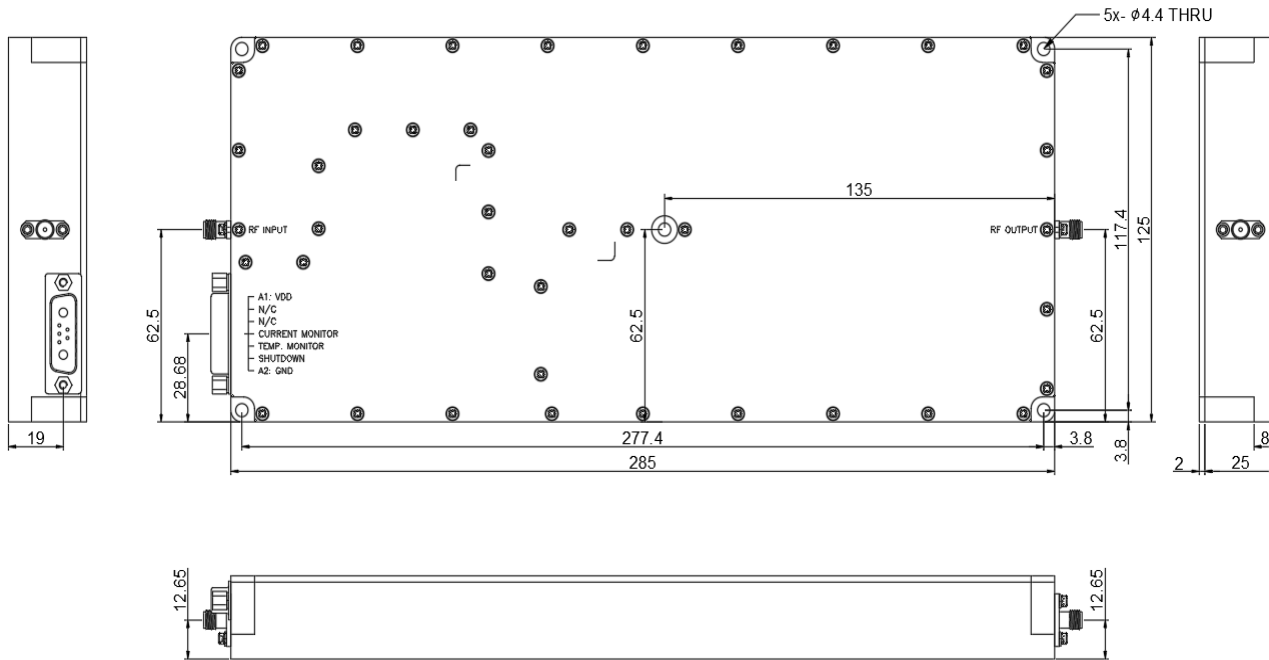




Connect with MtronPTI
mtronpti.com

Orlando

2525 Shader Rd
Orlando, FL 32804 USA
Phone: 407-298-2000
Fax: 407-293-2979



Experienced

MtronPTI continues nearly fifty years of service to aerospace, defense communication and control, Internet and mobile infrastructure, lab and field instrumentation EMs.

Vertically integrated

MtronPTI provides High reliability, High Power Solid State Power Amplifier solutions for demanding applications. Our design and manufacturing capabilities cover 50KHz to 47GHz frequency range with power levels of 1W to 4kW for CW & Pulse application modules and over 10kW for such systems. Synergy between our engineering manufacturing— from concept, simulation, electrical & mechanical layouts to assembly & testing capabilities allow for quick engineering & manufacturing responses to customer requests.

One-on-one technical relationships

Each project is unique in design, environmental, schedule and cost requirements. **MtronPTI** engineers work with your designers to select the best approach. Six sigma and AS9100 Rev C quality systems ensure reliable solutions.

Long term support

MtronPTI uses Rapid Process Feedback, Lean Manufacturing and Demand Flow Technology for right product, right time, on specification. **MtronPTI** also manages the supply chain: aligning forecasts, qualifying purchased component suppliers and working with distributors, hubs and portals to make sure every time the production line reaches for an **MtronPTI** part, it'll be there.

