

Applications

Test and Measurement
Electronic Warfare
Radar
Broadband Jamming
Public Safety

Quality & Certifications

AS9100 Rev C
ISO9001:2008
Mil-STD-790 Certificate
RoHS compliance
Conflict Minerals Compliant



PA1086- 2.0-6GHz, 250W, 54dB- Solid State High Power Amplifier Module

FEATURES

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

ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	2.0 - 6.0 GHz	
Power Output CW	250 Watt Min	
Power Gain	54 dB Min	
Power Gain Flatness	4.0 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	44dBm/Tone, $\Delta = 1$ MHz
Harmonics	>20 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	28 - 30 VDC	
Current Consumption	52 Amp Max	At rated Pout
Max Input Power	+8 dBm	Without damage
Load VSWR Protection	∞:1	
Turn On / Off Speed	5 μSec Max	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensation
Altitude	15000 ft.	

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	250 x 200 x 27 mm	Excluding Connectors
Weight	2 Kg.	
RF Connectors In/Out	SMA / Type-N female	
DC Power / Interface Connector	Hybrid 9-Pin D-Sub	9W4
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

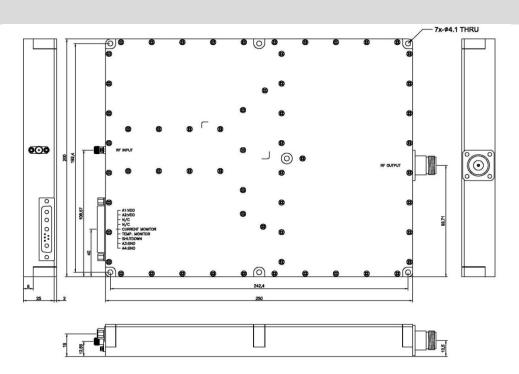
Pin	Function	Description
1	NC	
2	NC	
3	Current sensor	I _D @20mV/100mA Typ
4	temperature sensor	$V_T@10mV/^{\circ}C + 500mV Typ$
5	Shutdown	TTL
A1, A2	VDD	28VDC
A3, A4	GND	Ground

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Connect with MtronPTI

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Orlando

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Experienced

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

Vertically integrated

MtronPTI provides High reliability, High Power Solid State Power Amplifier solutions for demanding applications. Our design and manufacturing capabilities cover 250KHz to 47GHz frequency range with power levels of 1W to 4kW for CW and up to 10KW for Pulse application. 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.

















