

FEATURES

- Class AB linear GaN design
- Instantaneous wide bandwidth
- Suitable for all single channel 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	50 Watt Min / 70 Watt Typ	CW
Power Output @ P1dB	25 Watt Typical	CW
Power Gain	47 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	37dBm/Tone, $\Delta = 1$ MHz
Harmonics	>20 dBc Typ	At rated Pout
Non Harmonics Spurious	>60 dBc	
Operating Voltage	28 - 30 VDC	
Current Consumption	10 Amp Max	At rated Pout
Max Input Power	+8 dBm	10 Sec Without damage
Load VSWR Protection	$\infty : 1$ @ any Phase & Angle	1 Minute @ rated output

ENVIRONMENTAL CHARACTERISTICS

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

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	230 x 106 x 27 mm	Excluding Connectors
Weight	1.3 Kg.	
RF Connectors In/Out	SMA female	
DC Power / Interface Connector	9-Pin 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	$V_T @ 10mV/^\circ C + 500mV$ Typ
5	SHUTDOWN	TTL - Optional 5 μ S switching speed
6, 7	VDD	28VDC
8, 9	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



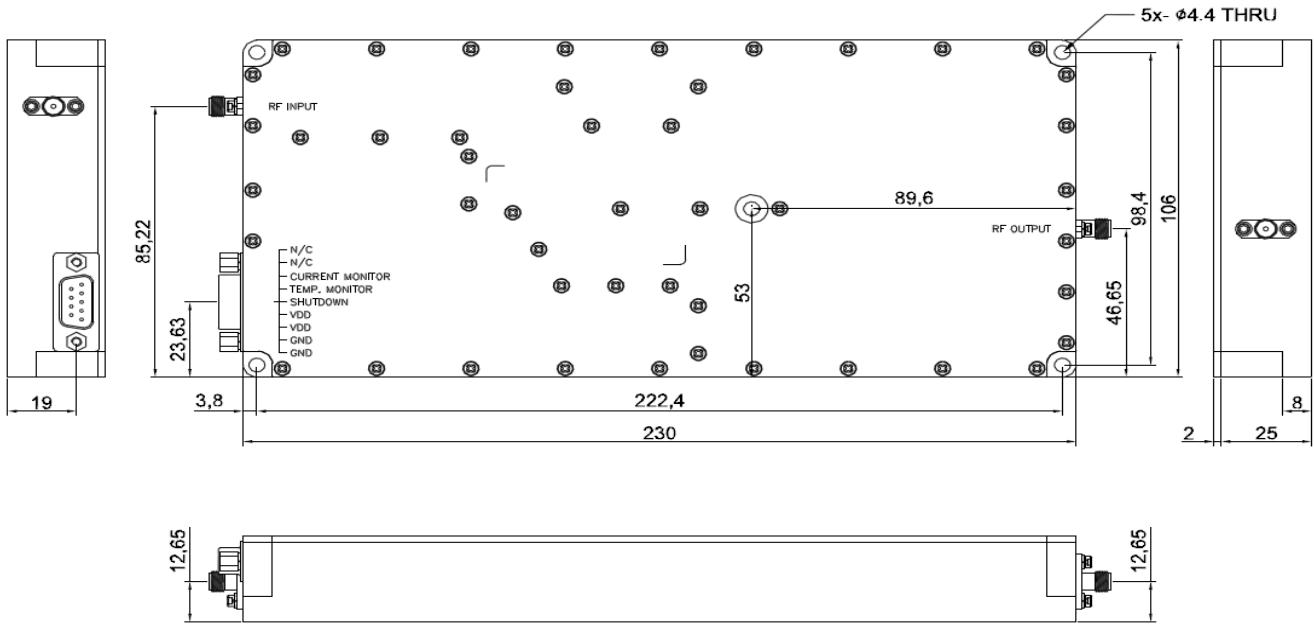


Fast facts

Connect with MtronPTI

mtronpti.com

OUTLINE DRAWING



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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 & 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.

