

Quality & Certifications

AS9100 Rev D ISO9001:2008

Global Service Centers

Orlando, USA Noida, India



PA20100-75W 50dB SOLID STATE HIGH POWER AMPLIFIER MODULE

FEATURES

Class AB linear LDMOS design Instantaneous wide bandwidth Suitable for all single channel modulation standards Built-in monitoring and protection circuits High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	20 - 100 MHz	
Power Output Psat	75 Watt Min	CW
Power Gain	50 dB Min	
Power Gain Flatness	3.0 dB p-p Max	
Input Return Loss	10 dB Min	Relative to 50 Ohm
2-Tone Intermodulation (IMD)	-30 dBc Typ	40dBm/Tone, $\Delta = 1MHz$
Harmonics	-20 dBc Typ	At rated Pout
Non Harmonics Spurious	-60 dBc Max	
Operating Voltage	28 VDC ± 0.5 V	
Current Consumption	10 Amp Max	At rated Pout
Max Input Power Protection	+8 dBm	Without damage
Load VSWR Protection	∞ : 1 Min	
Turn On / Off Speed	5 μSec	<10 Sec

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	162 x 96 x 27 mm	Excluding Connectors
Weight	600 gr.	Typical Weight
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	-	N/C
2	-	N/C
3	CURRENT SENSOR	I _D @20mV/100mA Typ
4	TEMP SENSOR	V_{T} @10mV/°C + 500mV Typ
5	SHUDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground

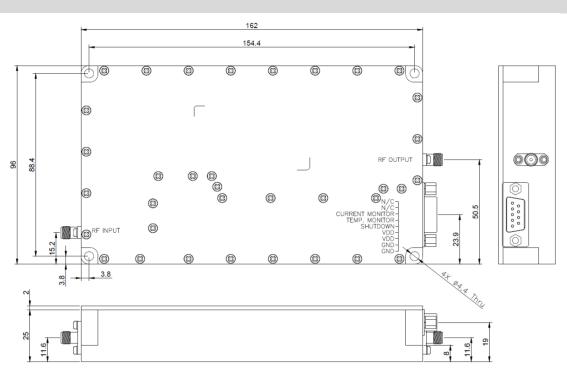
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Orlando

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Experienced

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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.

















