

Applications

Test and Measurement Electronic Warfare Radar Broadband Jamming Public Safety

Quality & Certifications

AS9100 Rev C ISO9001:2008 RoHS compliance Conflict Minerals Compliant



PA3140 31-40GHz, 5W SOLID STATE HIGH POWER AMPLIFIER MODULE

FEATURES

Class AB linear GaAs FET hybrid design Instantaneous wide bandwidth Designed for military and aerospace applications Suitable for all single channel modulations standards Built-in protection circuits High reliability and ruggedness



ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	31.0 - 40.0 GHz	
Power Output Psat	5 Watt Min	
Power Output @ P1dB	4 Watt Min	
Power Gain	37 dB Min	
Power Gain Flatness	6.0 dB p-p Max	Constant input power
Input / Output Return Loss	10 dB Min	Relative to 50 Ohm
Noise Figure	12 dB Max	
Harmonics	-20 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	9 VDC Nom	
Current Consumption	18 Amp Max	At rated Pout
Max Input Power	0 dBm Max	Without damage
Load VSWR Protection	5:1	

ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case	-20 to +65 °C	
Temperature		
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensation

MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	110 X 130 X 27 mm	Excluding Connectors
Weight	750 gr.	
RF Connectors In/Out	SMA K Type female	
DC Power / Interface	9-Pin D-Sub	
Connector		
Cooling	External Heatsink	Forced air required

D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1	N/C	Reserved
2	N/C	Reserved
3	CURRENT SENSOR	I _D @20mV/100mA Typ
4	TEMP SENSOR	V_T @10mV/°C + 500mV Typ
5	SHUTDOWN	TTL
6,7	VDD	9VDC
8,9	GND	Ground

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

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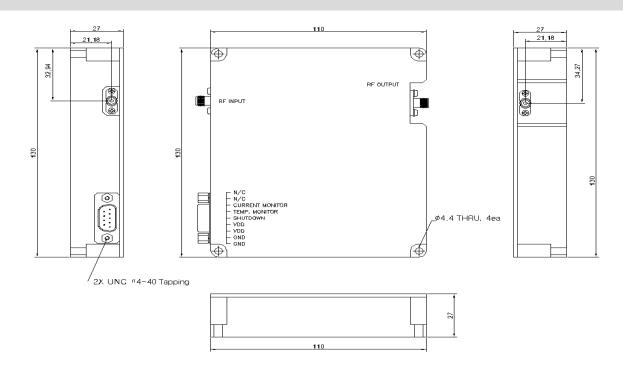


Connect with MtronPTI

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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 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.

















