



## PA6018-001-20W 43dB SOLID STATE HIGH POWER AMPLIFIER MODULE

### FEATURES

- High Power Linear GaAsFET design
- Instantaneous wide Bandwidth
- Suitable for all single channel modulation standards
- Built-in protection circuits
- High reliability and ruggedness



### ELECTRICAL SPECIFICATIONS

Parameter	Specification	Notes
Operating Frequency Range	6.0 - 18.0 GHz	
Power Output Past	20 Watt Min	CW
Small Signal Gain	43 dB Min	
Power Gain Flatness	4.0 dB p-p Max	
Input Return Loss	10 dB Min	
Harmonics	-20 dBc Typ	At rated Pout
Spurious	-60 dBc Max	Non-harmonics
Noise Figure	8.0 dB Max	
Operating Voltage	12 VDC Nom	
Current Consumption	22 Amp Max	At rated Pout
Input Power Protection	+3 dBm Max	<10 Sec without damage
Load VSWR Protection	5 : 1	<1 minute at rated Pout

### ENVIRONMENTAL CHARACTERISTICS

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

### MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	170 x 180 x 27 mm	Excluding-connectors
Weight	1.5 kg	
RF Connectors In/Out	SMA female	Cover Flange
DC Power / Interface Connector	7-Pin Hybrid D-Sub	
Cooling	External Heatsink	Forced air required

### D-SUB CONNECTOR PIN ASSIGNMENT

Pin	Function	Description
1		N/A
2		N/A
3	Current Sensor	I <sub>D</sub> @20mV/100mA Typ
4	Temp Sensor	V <sub>T</sub> @10mV/°C + 500mV Typ
5	Shutdown	TTL
A1	VDD	12VDC
A2	GND	Ground

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

mtronpti.com

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### Quality & Certifications

AS9100 Rev D

ISO9001:2008

### Global Service Centers

Orlando, USA

Noida, India

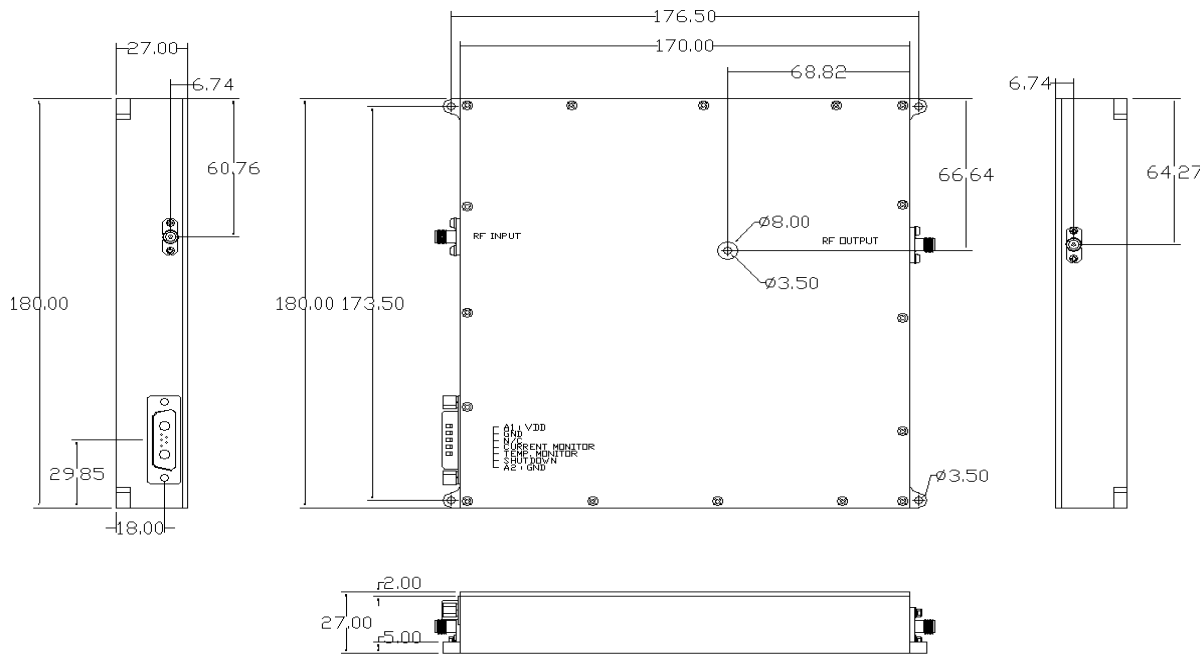




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**Experienced**

**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.

