

# **Applications**

Test and Measurement Electronic Warfare Radar Broadband Jamming Public Safety

## **Quality & Certifications**

AS9100 Rev C ISO9001:2008

Global Service Centers
Orlando, USA



# PA0352-01K 30 to 520MHz 1KW Solid State Power Amplifier System

### **FEATURES**

Rack mounted system
Class AB linear LDMOS 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	30 - 520 MHz	
Power Output	1000 Watt Min	CW
Power Gain	60 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	$50$ dBm/Tone, $\Delta = 1$ MHz
Harmonics	-20 dBc Typ	
Non Harmonics Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	180 - 240 VAC	
Power Consumption	5 KW Max	At rated Pout
Max Input Power	+8 dBm	Note 1
Load VSWR Protection	∞: 1	Note 2

#### Notes:

- 1. Nominal Input Power is 0dBm. +8dBm is allowed for up to 10Sec with no damage.
- 2. 1 Minute Max @ rated Pout

## **ENVIRONMENTAL CHARACTERISTICS**

Parameter	Specification	Notes
Operating Case Temperature	0 to +50 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non Condensing

### MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	R5U+ R3U	Rack mounted chassis
Weight	60 Kg.	
RF Connectors In/Out	Type-N Female	Front panel standard
AC Power	See outline drawing	
Cooling	Built in Fan Cooling	Variable speed
OPTIONAL: Digital Monitor	Ethernet RJ-45 TCP/IP,	Local LCD or a Remote Bluetooth
& Control	RS422/485	application
FWD, REV, VSWR, GAIN,	Optional GPIB Interface	
ALC, V & I, TEMP		

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

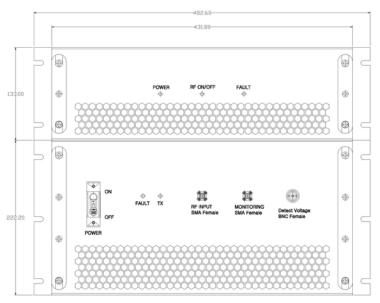
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# Connect with MtronPTI

## mtronpti.com

## **OUTLINE DRAWING(ref. Only)**



### 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 & 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.















