

Applications

Test and Measurement Electronic Warfare Radar Broadband Jamming Public Safety

Quality & Certifications

AS9100 Rev C ISO9001:2008

Global Service Centers

Orlando, USA



PA0525-01K 0.5 to 2.5GHz 1KW Solid State Power Amplifier System

FEATURES

Rack mounted system Class AB linear GaN 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	0.5 - 2.5 GHz	
Power Output @ Saturation	1000 Watt Min / 1400 Watt Typ	CW
Modulation Standards	AM / FM / Pulse	0-100%
Power Gain	60 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	>30 dBc Typ	50dBm/Tone, $\Delta = 1$ MHz
(IMD)	>30 dBc Typ	Journal Tone, Δ – Twittz
Harmonics	>20 dBc Typ	At rated output power
Non Harmonics Spurious	-60 dBc Max	
Operating Voltage	120/208 VAC, 3-Phase	50-60Hz
Power Consumption	4.5 KW Max	At rated Pout
Max Input Power	+8 dBm	Without damage
Load VSWR Protection	∞:1	At rated Pout for <1 minute

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 W x H x D	8U + 2U Rack Mount Chassis	See outline drawing
Weight	-	
RF Connectors In / Out	Type-N Female / 7/16 DIN Female	Rear Panel
AC Power / Interface	IEC 60320-C14 / 9-Pin D-Sub	Or equivalent
Cooling	Built in Fan Cooling	Variable speed
OPTIONAL: Digital Monitor & Control: FWD, REV, VSWR, GAIN, ALC, V & I, TEMP	Ethernet RJ-45 TCP/IP, RS422/485, Optional GPIB Interface	Remote Bluetooth application

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

mtronpti.com 407-298-2000 MtronPTI 2525 Shader Road Orlando, FL 32804

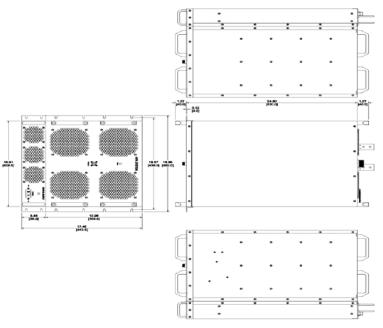


Connect with MtronPTI

mtronpti.com

Orlando 2525 Shader Rd Orlando, FL 32804 USA Phone: 407-298-2000 Fax: 407-293-2979

OUTLINE DRAWING(ref. Only)



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.















