



## PA92085-S01 3W SOLID STATE POWER AMPLIFIER MODULE

### FEATURES

Class AB linear LDMOS design  
Designed for UMTS linear communication applications  
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	2324.244 to 2328.256 MHz	
Power Output OFDM	3 Watt Avg Min	10dB PAR
Power Gain	25 dB Min	
Power Gain Flatness	1.0 dB p-p Max	
Input / Output Return Loss	12 dB Min	Relative to 50 Ohm
Harmonics	-40 dBc Typ	At rated Pout
Noise Figure	10 dB Max	
Spurious	-60 dBc Max	Non-harmonics
Operating Voltage	28 VDC Nom	
Efficiency	30 % Nom	Target at rated Pout
Load VSWR Protection	$\infty : 1$ Min	Output isolator
Sample Port	-40 dB Nom	Coupling factor

### ENVIRONMENTAL CHARACTERISTICS

Parameter	Specification	Notes
Operating Case Temperature	-20 to +75 °C	
Storage Temperature	-40 to +85 °C	
Relative Humidity	5 to 95 %	Non-condensing

### MECHANICAL SPECIFICATIONS

Parameter	Specification	Notes
Dimensions	200 x 160 x 40 mm	Excluding connectors
Weight	TBD	Max Weight
RF Connectors In/Out/Sample	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	FWD	N/A
2	VVA	N/A
3	CURRENT SENSOR	$I_D @ 20mV/100mA$ Typ
4	TEMP SENSOR	$V_T @ 10mV/^{\circ}C + 500mV$ Typ
5	SHUTDOWN	TTL
6, 7	VDD	28VDC
8, 9	GND	Ground

### Applications

Test and Measurement  
Electronic Warfare  
Radar  
Broadband Jamming  
Public Safety

### Quality & Certifications

AS9100 Rev C  
ISO9001:2008

### Global Service Centers

Orlando, USA



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



## Connect with MtronPTI

**mtronpti.com**

### Outline (#TBD)

#### 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 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 elect 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.

