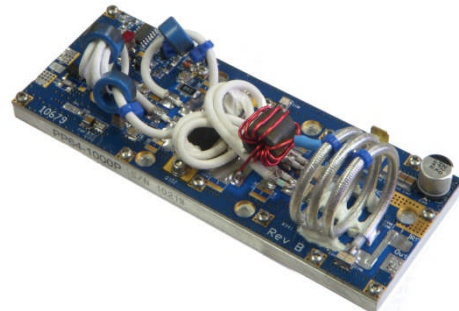




# PP64-1000P 1.5T MRI 1kW Solid State High Power Pallet Amplifier

The PP64-1000P is a very high power ultra-linear Class AB Pallet Amplifier providing 1000 Watts peak power output in an extremely small footprint. Featuring the latest generation LDMOS transistors, the PP64-1000P provides the highest power density of any 1.5T MRI pallet in the world today. Thermal tracking bias allows the PP64-1000P to operate Class AB while providing the linearity and peak power required of today's 1.5T MRI systems.



### Operating Specifications

(Vsupply=+50VDC, I<sub>dq</sub>=3.7A 10% duty cycle, TBase=25°C)

Parameter	Min.	Typ.	Max.	Units
Power Out Peak 3 msec pulse width	1000			Watts
Power Gain	26	27.5		dB
Power In		1.75		Watts
Frequency		64		MHz
Average Drain Current 3msec triangle wave		6.5		Amps
Input Return Loss		-20		dB
Gain linearity (Variation over 0-60dBm peak output power)		+/-0.25	+/-0.35	dB
Phase linearity (Variation over 0-60dB peak output power)		+/-3.0	+/-5	Degrees
Insertion phase variation (unit to unit)		+/-3.0		Degrees
Gain Variation (unit to unit)		+/-1.0		dB
Second Harmonic		-45		dBc
Third Harmonic		-28		dBc
Baseplate Temperature	0		+65	°C
Weight		7.6		Oz.
Dimensions	2.1" x 5.9" x 1.5" 53.8mm x 149.87mm x 38.1mm			

### FEATURES

- 1000 Watts Peak
- 1300 Watts Typical P<sub>1dB</sub>
- Ultra - linear
- Highest Power Density Available
- 50 Ohm input/output
- Thermal tracking Bias
- No tuning required

### Absolute Maximum Ratings

Parameter	Value
Input Voltage	+50V DC
Bias Current	4.0A
Maximum pulse width, 1kW peak, 15% duty cycle	4 msec
Average Drain Current 15% duty cycle	9A
Load Mismatch All Phase angles, 10% duty cycle. Average drain current limited to 9A.	3:1
Baseplate Temperature	+65° C

Power Module Technology • 3107 N. Deer Run Road, Suite 20, Carson City, Nevada 89701 USA.

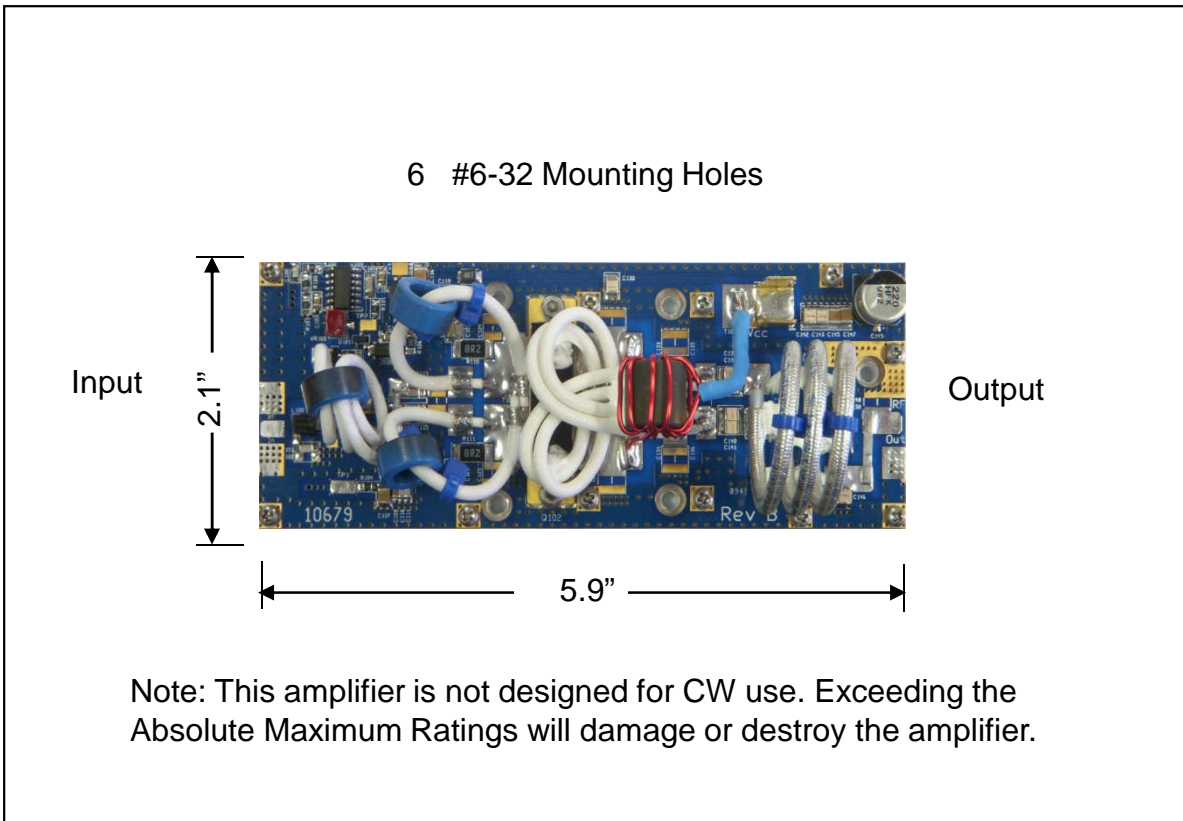
Tel: +1.775.883.1122 e-mail: [sales@pmtrf.com](mailto:sales@pmtrf.com) web: <http://www.pmtrf.com>

Specifications contained herein are subject to change without notice.

PMT assumes no liability for the use of this information.

© PMT 2008

Reference Circuit



Reference circuit size (not to scale)

**Power Module Technology, • 3107 N. Deer Run Road, Suite 20, Carson City, Nevada 89701 USA.**

Tel: +1.775.883.1122 [e-mail: sales@pmtrf.com](mailto:sales@pmtrf.com) web: <http://www.pmtrf.com>

Specifications contained herein are subject to change without notice.

PMT assumes no liability for the use of this information.

© PMT 2008



**PP64-1000P**  
**1.5T MRI 1KW**  
**Solid State**  
**High Power Pallet Amplifier**

Revision History:

11-11-09

Data Sheet

We listen to your comments

If there is any information within this document that you feel is wrong, unclear or missing, please give us your feedback as it will help us to continuously improve the quality of this document. Please send your suggestions (including a reference to this document) to:

[Bob.Todd@PMTRF.com](mailto:Bob.Todd@PMTRF.com)

To request other information please call 1-775-883-1122

Attention please:

The information herein is given to describe certain components and shall not be considered as a guarantee of characteristics. Terms of delivery and rights to technical change reserved.

For further information on technology, delivery terms, conditions and prices, please contact the sales department at PMT headquarters at 1-775-883-1122

**Power Module Technology, • 3107 N. Deer Run Road, Suite 20, Carson City, Nevada 89701 USA.**

**Tel: +1.775.883.1122 e-mail: [sales@pmtrf.com](mailto:sales@pmtrf.com) web: <http://www.pmtrf.com>**

Specifications contained herein are subject to change without notice.

PMT assumes no liability for the use of this information.

© PMT 2008