



PP100-500-250

100-500 MHz – 250W

Solid State Broadband

High Power Pallet Amplifier

The PP100-500-250 is a 250W, Class A/AB High Gain Linear amplifier pallet for the 100 - 500 MHz band. Superior performance is provided offering high gain, efficiency, and power using broadband matching techniques and the finest Gold MOSFET/LDMOS transistors available on the market today. Matched for 50 ohms input and output, the PP100-500-250 is a linear amplifier providing 250 watts at P1dB making this the natural choice for your high power broadband applications.



Specifications

(Vsupply=+28V Vdc, Idq=3.0A, TBase=25°C) Pout = 250W

Parameter	Min.	Typ.	Max.	Unit
Frequency	100		500	MHz
Pout CW P1dB	200	250		Watts
Linear Power Out <small>AM 5% dist max, 80% mod.</small>	50	65		Watts
IMD3 <small>100 to 500 MHz For 2 tones, 10kHz spacing, 250 W PEP</small>			-26	dBc
Power In		0.8		Watts
Gain	22.5	25		dB
Drain Current <small>250W CW</small>		20	24	Amps
Drain Current <small>65W carrier power, AM Mode</small>		12	14.5	Amps
Efficiency	35	45		%
Input VSWR		1.2:1	1.5:1	
Supply Voltage	26	28	32	Volt
Phase Variation <small>unit to unit</small>			+/-5	Degrees
Gain Variation <small>unit to unit</small>			+/-1.5	dB
2 nd Harmonic		-30		dBc
3 rd Harmonic		-25		dBc
Dimensions	4.0" x 10.0" x 1.5"			

Features

- 250 Watts P1dB Typ., Class A/AB
- 50 ohms input/output
- Bandwidth 100-500 MHz
- All Gold MOSFETS for Maximum Reliability

Maximum Ratings

Parameter	Value
Supply Voltage	+32VDC
Stable Oper. Voltage	+26-32VDC
Bias Current	3.5 Amp
Drain Current	25.0 Amp
Load mismatch Survival <small>All phase angles, current limited to 25.0A for 3 seconds</small>	5:1
Storage Temp.	-20°C - +85°C
Baseplate Oper. Temp.	+60°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 web: <http://www.pmtrf.com>

Specifications contained herein are subject to change without notice.

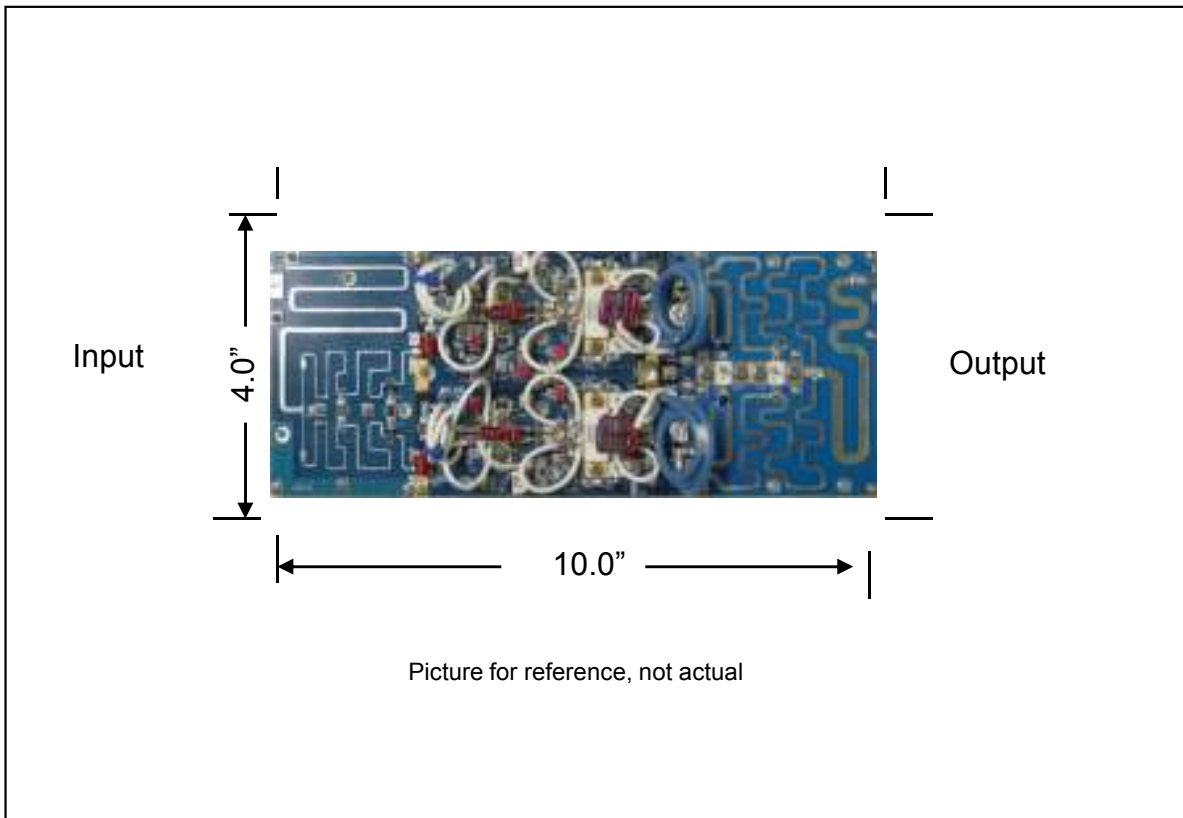
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Reference Circuit



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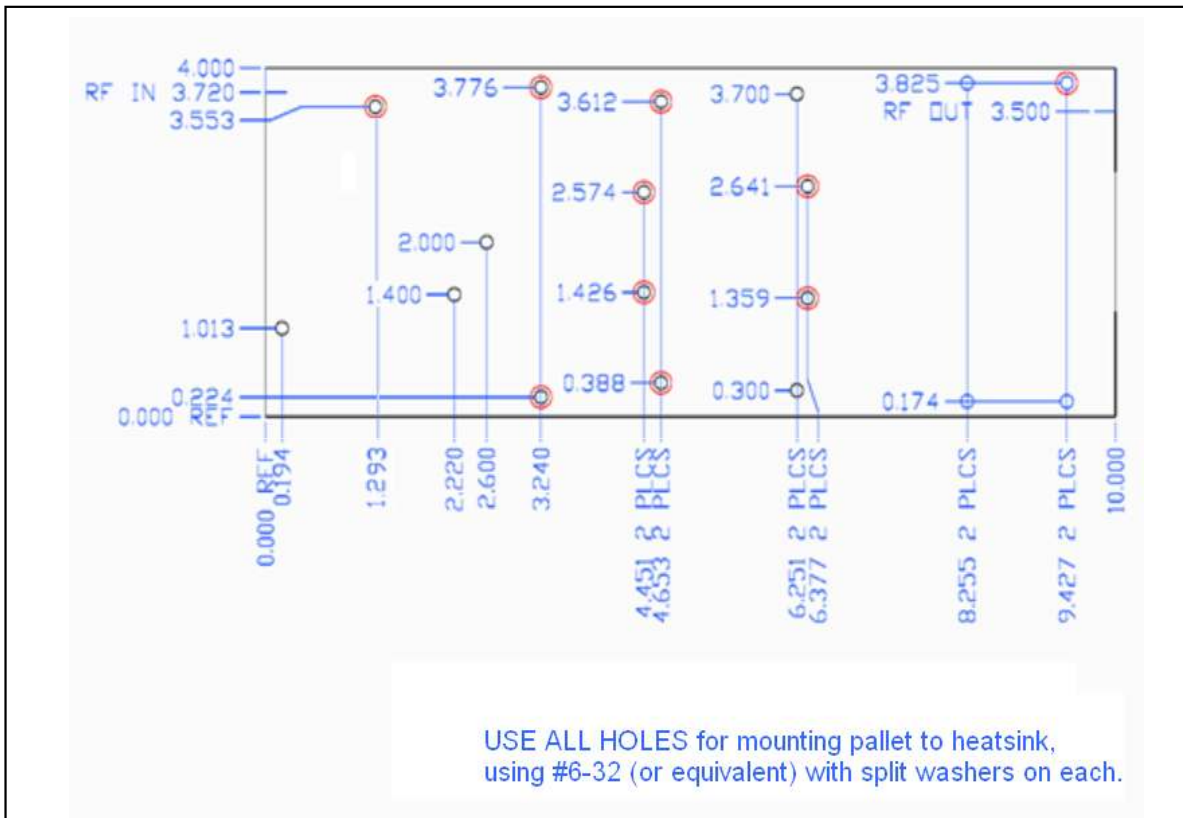
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Dimensions



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Previous Versions:	-	4/23/08	Preliminary Data Sheet
Page	Subjects (major changes since last revision)		
Revision History:	-	9/08/08	Final Data Sheet
Rev. 2	Product Name Change	3/19/09	
Rev. 3	improved drain current and 2 nd harmonic 02/15/11		

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:

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

Attention please:

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

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