



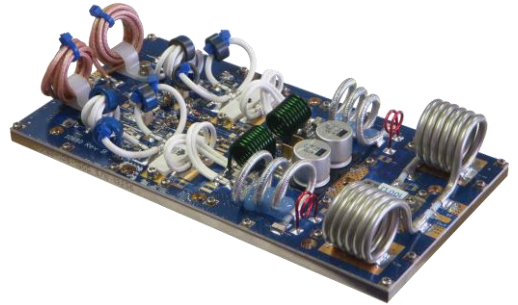
# PP88-108-1500

## Full Band FM – 1500W

### Solid State Broadband

### High Power Pallet Amplifier

The PP88-108-1500 is a very high power Class B pallet amplifier providing 1500 Watts CW Power output. Featuring the latest generation of LDMOS transistors, the PP88-108-1500 provides the most CW FM power available anywhere in the world today. Thermal tracking bias allows the PP88-108-1500 to operate Class B providing 1500 Watts CW at 82% efficiency making it your best choice for FM Broadcast applications.



### Operating Specifications

(Vsupply=+43 V<sub>DC</sub>, I<sub>DQ</sub>=0.2A, TBase=25°C)

Parameter	Min.	Typ.	Max.	Units
Power Out, CW	1500			Watts
Power Gain	24	25		dB
Power In		4.7		Watts
Frequency	88		108	MHz
Drain Current		42.5		Amps
Efficiency	79	82		Percent
Input Return Loss			- 14	dB
Insertion Phase Variation (Unit to Unit)		+/-5.0		Degrees
Gain Variation Unit to Unit		+/-1.0		dB
Second Harmonic		-30		dBc
Third Harmonic		-25		dBc
Baseplate Temperature	0		+65	°C
Baseplate Dimensions	4.0"x 7.8"x 1.5"			

### FEATURES

- 1500 Watts CW
- 82% Efficiency
- Thermal Tracking Bias
- 50 Ohms input/output

### Absolute Maximum Ratings

Parameter	Value
Input Voltage	+45V DC
Bias Current	2.0A
Drain Current	50A
Load Mismatch All Phase angles, Drain current limited to 50 A, 3 seconds max.	3:1
Baseplate Temperature	+65°C

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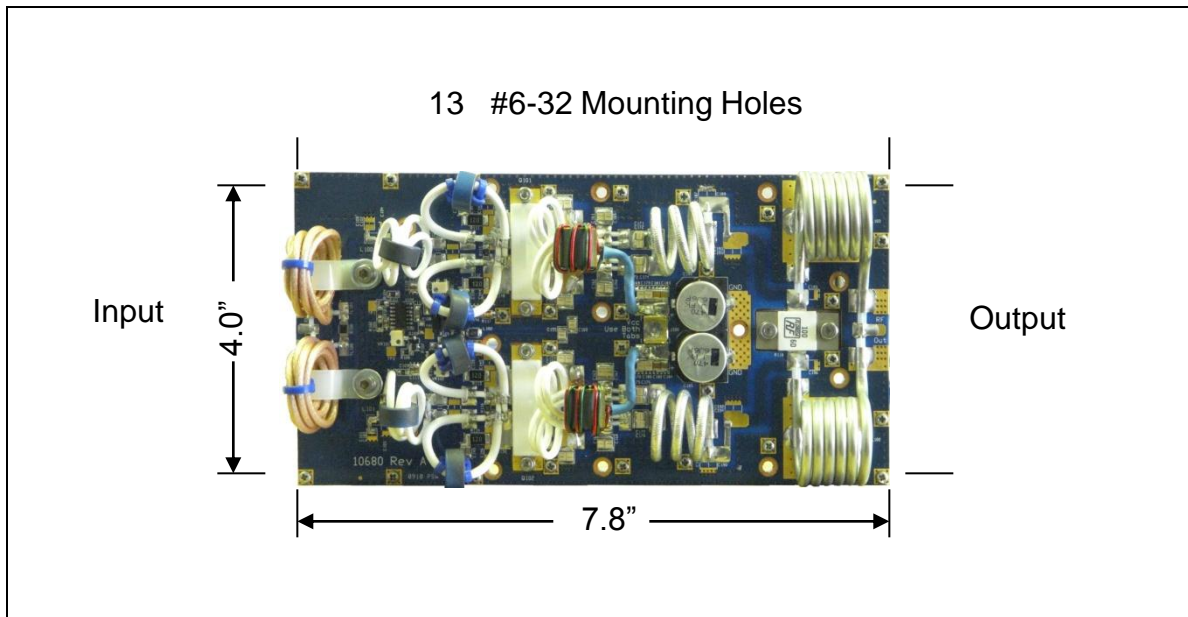
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Reference circuit size (not to scale)



Note: This is an extremely high power RF Amplifier, capable of drawing more than 50A @ 43 VDC. Use both ¼" lug terminals to supply DC power to this pallet, using at least 2 x 12 ga. supply wires. Although this is a very high efficiency amplifier, adequate cooling must be provided, ensuring that the baseplate temperature does not exceed +65°C . Also provide at least 10 cfm of ambient temperature air flow across the top of the pallet to aid in cooling the output transformers. Although this amplifier incorporates extensive DC bypassing, some RF will still be present at the DC input. It is recommended that the system integrator take appropriate precautions to protect their DC power supply and small signal control circuitry from conducted and radiated RF emissions from this amplifier. Please consult the factory for more information.

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**PP88-108-1500**  
**Full Band FM – 1500W**  
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**High Power Pallet Amplifier**

Revision History:	03-04-09	Data Sheet
	06-16-09	Increased efficiency, reduced
power In & drain current. Improved 2 <sup>nd</sup> & 3 <sup>rd</sup> harmonics, increased base plate temp.		
	03-01-11	Design change to air core DC
feeds. Updated operational noted.		

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

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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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