



# PM30-50-100

## 30-50 MHz – 100W

### Solid State Broadband High Power Module Amplifier

The PM30-50-100 is a 100W module amplifier for the 30-50 MHz VHF band. Superior harmonic performance is provided through the use of an internal elliptic output filter. High gain, efficiency, and power are achieved using advanced broadband RF matching networks, and the finest MOSFET transistors available on the market today. Matched for 50 ohms input and output, thermal tracking bias allows for the PM30-50-100 to operate Class AB providing 100 watts P1dB making this the natural choice for your high power communications application in the 30 to 50 MHz band.



Specifications (Vsupply=+28Vdc, Idq 2.3 Amps, TBase=25°C)				
Parameter	Min.	Typ	Max.	Unit
Frequency	30		50	MHz
Pout P1dB	100	112		Watts
Gain	18.5	20.0	21.5	dB
Gain Variation		+/-1	+/-1.5	dB
Power In <small>@ rated PO</small>		1.0		Watts
Drain Current			9	Amps
Input R/L	14	16		dB
Load Mismatch All phase angles		5:1		VSWR
2 <sup>nd</sup> Harmonic	-70			dBc
3 <sup>rd</sup> Harmonic	-70			dBc
Spurious Signals	-70			dBc
Distortion Imd3, 2 tone		-30		dBc
Physical Dimensions	7.0"x3.0"x1.25"			

## Features

- 100 Watts P1dB Class AB Linear
- Superb Harmonic Performance
- 50 ohms input/output
- Thermal tracking Bias
- No circuit tuning or RF assembly

Maximum Ratings	
Parameter	Value
Input Voltage	+30 VDC
Drain Current	9 Amp
Base Plate Temp	0 to +70°C
Storage Temp	-40° - +105°C

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

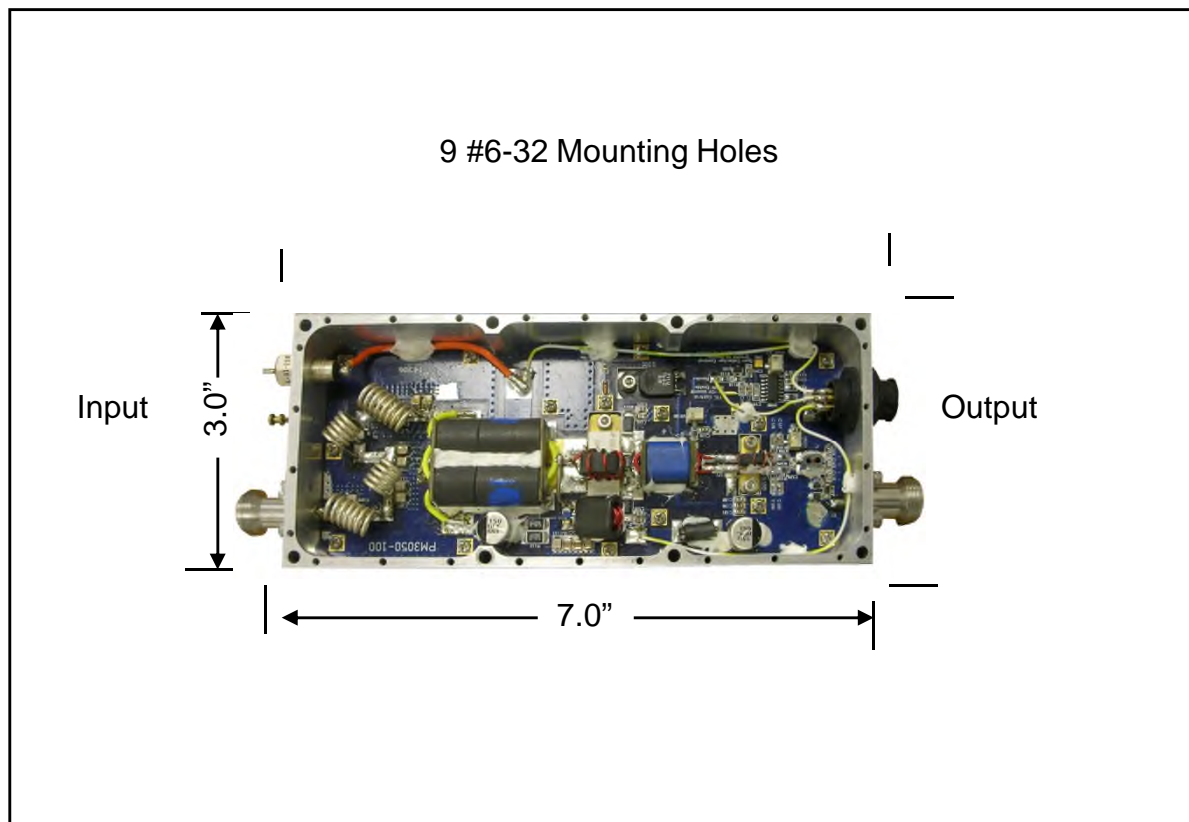
Tel: +1.775.883.1122 e-mail: [sales@pmtrf.com](mailto:sales@pmtrf.com) web: <http://www.pmtrf.com>

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



**PM30-50-100**  
**30-50 MHz – 100W**  
**Solid State Broadband**  
**High Power Module Amplifier**

Revision History:	06/10/08	Data Sheet
Previous Versions:	-	
Page	Subjects (major changes since last revision)	
Rev. 2	Product Name Change	3/19/09

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