



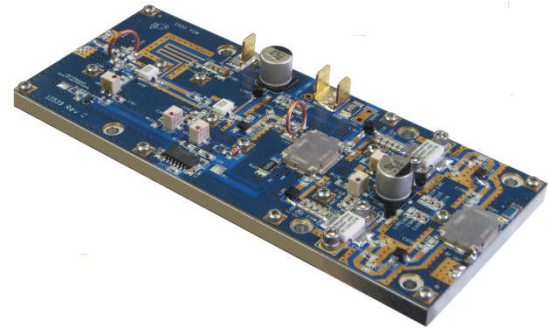
PP470-860-30

Full Band UHF – 30W

Solid State Broadband

High Power Amplifier Pallet

The PP470-860-30 is a 30W pallet amplifier for the 470-860 MHz band. This Class AB amplifier pallet utilizes three Gold MOSFET gain stages providing typical power gain of 44 dB at 35 Watts P1dB. A Quadrature combined output provides an excellent match for the pallet when integrating into a 50 Ohm system. Superior performance providing high gain, efficiency, and power in a small pallet footprint, makes this amplifier a great choice for your UHF TV broadcast applications.



Specifications

(Vsupply=+28V Vdc, Idq=1.25A, T_{Base}=25°C)

Parameter	Min	Typ	Max.	Unit
Frequency	470		860	MHz
Pout P1dB	35	40		Watts
Linear Power out Pk-Sync	16	20		Watts
Gain	42	44		dB
Power In		2		dBm
Efficiency		24		%
Input R/L		-18	-14	dB
2 nd Harmonic		-20		dBc
3 rd Harmonic		-40		dBc
Baseplate Operating Temp.	0		+60	°C
Size	2.5" x 6.0" x 0.7"			

Features

- 35 Watts, P1dB
- 20 Watts typ. Pk-Sync @ -40 dB IMD3
- 10 Watts typ. (avg.) Digital Power out
- Class A driver, Class AB Linear output stage
- 44 dB Gain Typ. full UHF Band
- 50 ohms input/output
- All Gold MOSFETs for maximum reliability
- No circuit tuning or RF assembly

Maximum Ratings

Parameter	Value
Input Voltage	+32 VDC
Bias Current	Q100 & Q101 0.25A each Q102 & Q103 1.25A each
Drain Current	4.0 Amp
Load Mismatch	5:1 All Phase angles, current limited to 4.0A
Baseplate Temp	-20° to +60°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 web: <http://www.pmtrf.com>

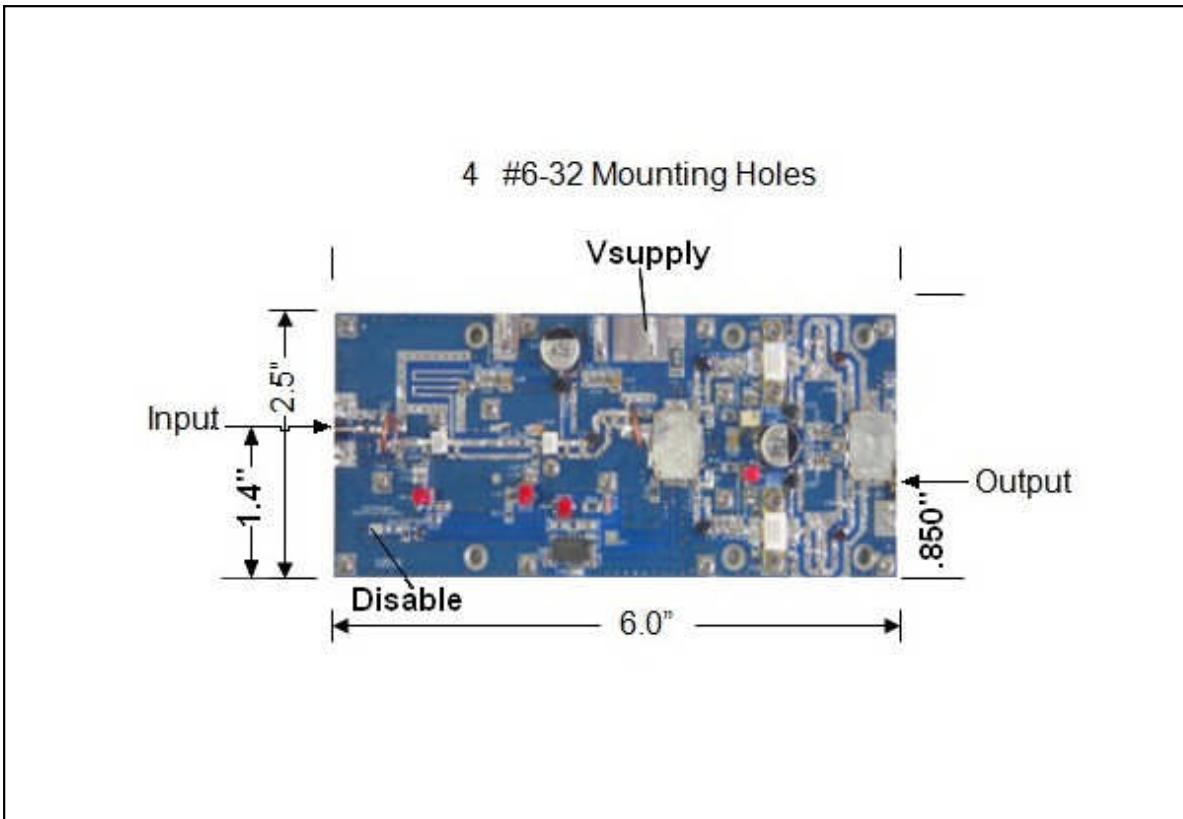
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Reference circuit size (not to scale)

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Previous Versions : 12/12/07 Data Sheet
Revision History : 01/12/09 Page 1 ,2
Subjects (major changes since last revision) increased gain, lowered Pin,
increased P1dB, specified input return loss, raised drain current max.,
Extended operating baseplate temperature range
Updated picture 02-25-09 Page 1.2
Product Name Change 03/09/09

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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
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