



# PP470-860-600

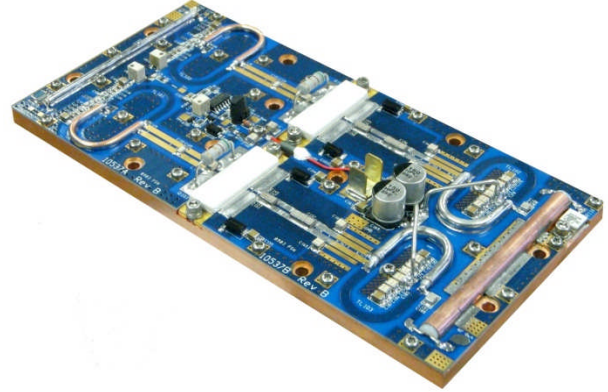
## Full Band UHF TV

### 600W Pk Sync

### Solid State Broadband

### High Power Pallet Amplifier

The PP470-860-600 is a Linear Class AB pallet amplifier featuring the latest generation LDMOS transistors, covering the entire UHF TV band. The PP470-860-600 can be used as an output PA @ 600 W Pk-Sync @ 5 IRE Sync Compression typical or an output PA @ 150W of DVB-T Average Digital Output Power, shoulder = < -32 dBc typical.



Operating Specifications (Freq. = 470-860 MHz, Analog V Supply = +40V <sub>DC</sub> , Digital V Supply = +42V <sub>DC</sub> , I <sub>DC</sub> = 2.4 A, T <sub>Base</sub> = 25°C)				
Parameter	Min	Typ.	Max	Units
Power Out, Pk.-Sync @ 5 IRE Sync Compression		600		Watts
Power Out, Digital Average Power DVB-T (8K OFDM) @ Vsupply +42V <sub>DC</sub>		150		Watts
Power Gain		17		dB
Efficiency @ 600 W pk.-sync.		40		%
Input Return Loss			- 14	dB
Insertion Phase Variation (Unit to Unit)		+/- 5.0		Degrees
Gain Variation (Unit to Unit)		+/- 1.0		dB
Gain Flatness		+/- 1.5		dB
Second Harmonic		-20		dBc
Third Harmonic		-25		dBc
2-Tone IMD <sub>3</sub> @ 600W PEP, Δf = 1 MHz		-35		dBc
Baseplate Temp.	0		+60	°C
Dimensions	3.5" x 7.0" x 1.0"			

## Features

- 600 Watts Pk-Sync Analog Power
- 150 Watts Digital Average Power
- Latest Generation LDMOS Transistors
- Channel 14-69: 470-860 MHz
- 50 ohms input/output
- Thermal tracking Bias
- No circuit tuning or RF assembly

Maximum Ratings	
Parameter	Value
Input Voltage	+43VDC
Bias Current	4.0 Amp
Drain Current	28.0 Amp
Load Mismatch All Phase angles, 2 Seconds maximum current limited to 28A max.	3:1
Baseplate Temp	+60°C
Storage Temp	-40° - +105°C

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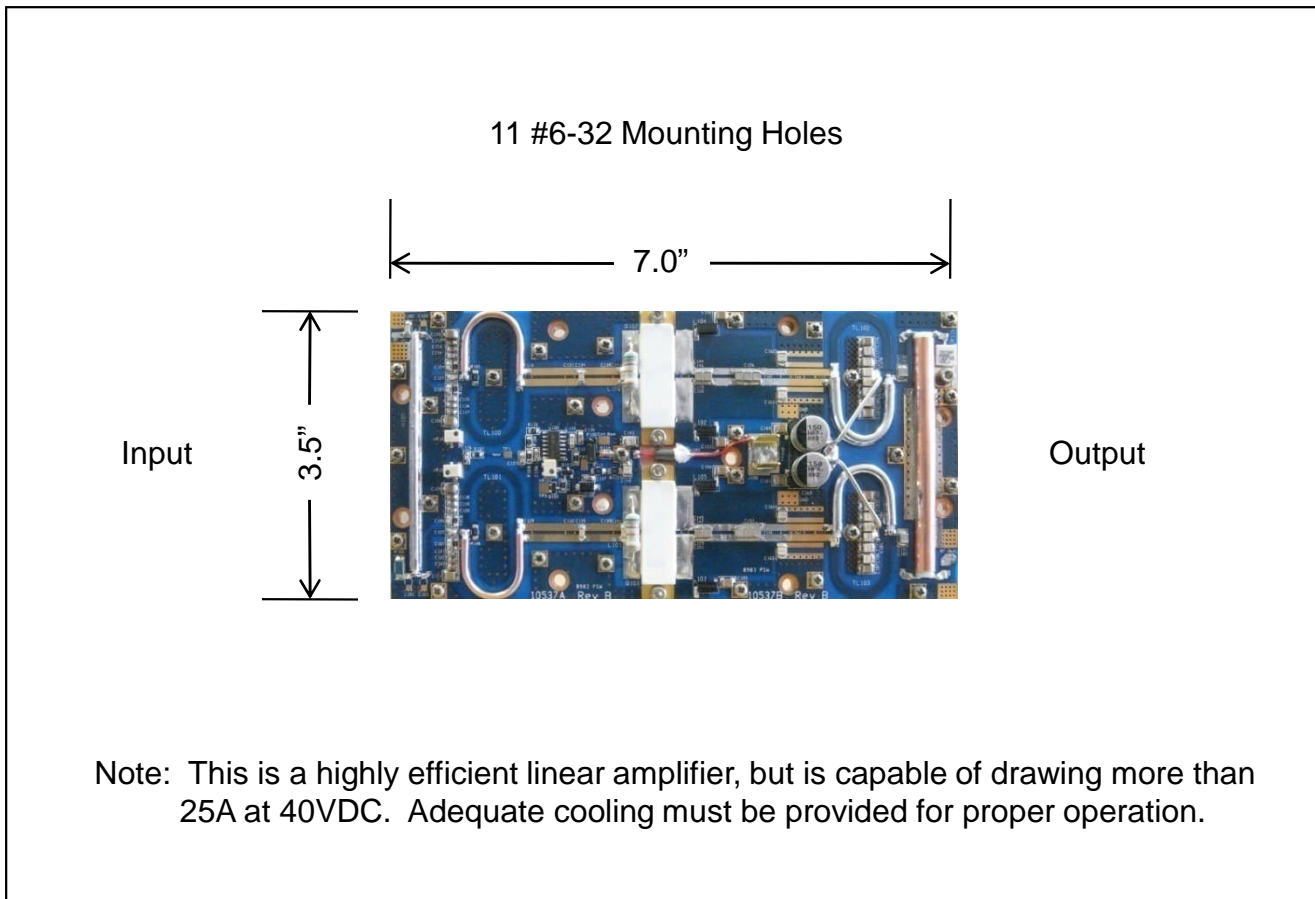
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**Full Band UHF TV**  
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Dimensions



Reference circuit size (not to scale)

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Revision History:	03-06-09	Data Sheet
Rev. 1	03-25-10	Added Digital Supply Voltage
specification		

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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

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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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