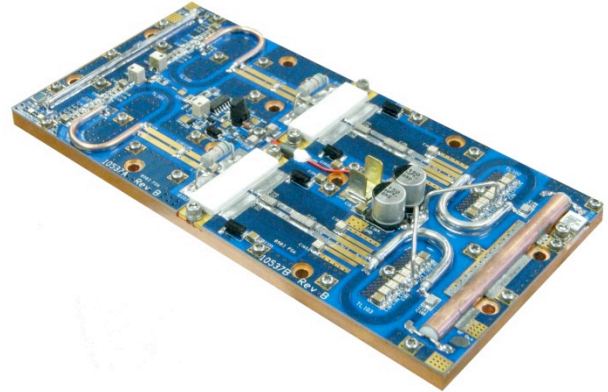




# HD28076-600

## Full Band UHF TV 600W Pk Sync Solid State Broadband High Power Pallet Amplifier

The HD28076-600 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 = < -33 dBc.



Operating Specifications (Freq. = 470-860 MHz V Supply = +40V <sub>DC</sub> , I <sub>BQ</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)		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

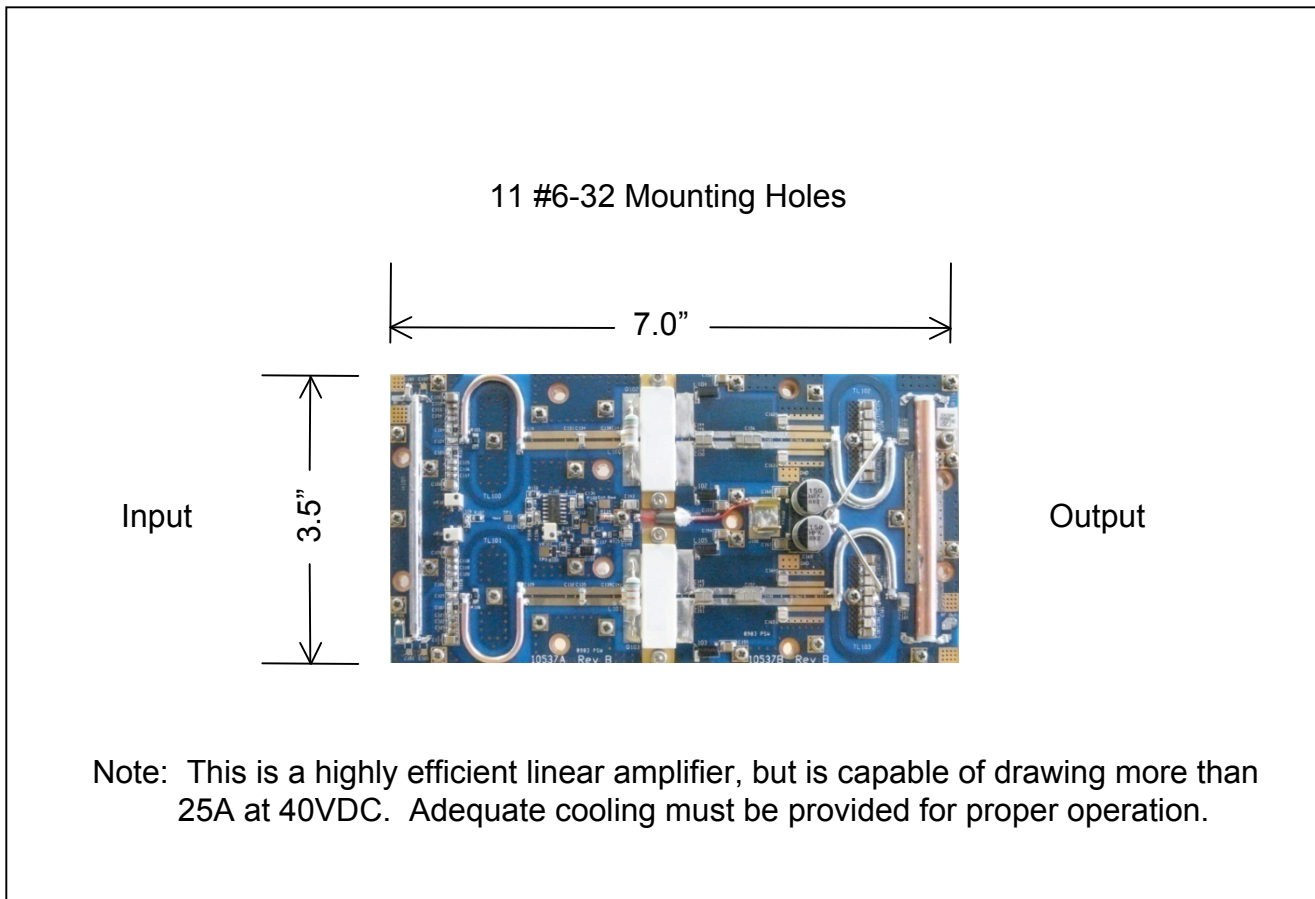
Maximum Ratings	
Parameter	Value
Input Voltage	+43VDC
Bias Current	4.0 Amp
Drain Current	28.0 Amp
Load Mismatch <small>All Phase angles, 2 Seconds maximum current limited to 28A max.</small>	3:1
Baseplate Temp	+60°C
Storage Temp	-40° - 105°C

HD Communications Corp.  
2180 Fifth Avenue, Unit 4, Ronkonkoma, NY 11779  
Tel: (631) 588-3877 Fax: (631) 588-3879 Email: sales@rfamplifiers.com



**HD28076-600**  
**Full Band UHF TV**  
**600W Pk Sync**  
**Solid State Broadband**  
**High Power Pallet Amplifier**

Dimensions



Reference circuit size (not to scale)

HD Communications Corp.  
2180 Fifth Avenue, Unit 4, Ronkonkoma, NY 11779  
Tel: (631) 588-3877 Fax: (631) 588-3879 Email: [sales@rfamplifiers.com](mailto:sales@rfamplifiers.com)