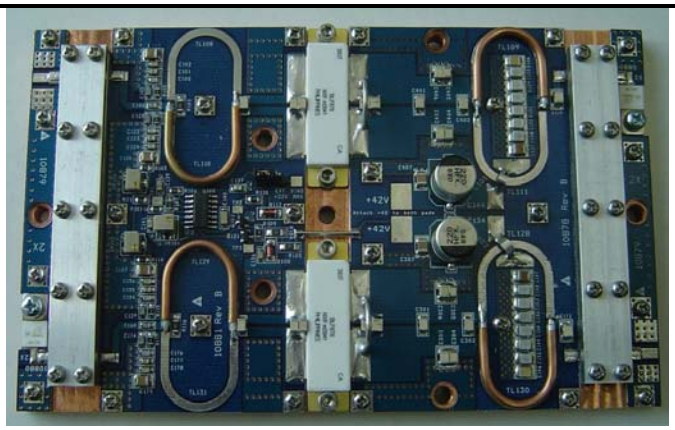
Broadcast Concepts Inc
11700 NW 102 Road Suite 4 Medley FL 33178
TEL: 305-887-8400 FAX 305-887-8444

Model AMG878-600 TV Pallet Amplifier Module

This amplifier module is ideal for final output stages in analog and digital TV broadcast equipment.

- **470– 860MHz**
- **42Volts**
- **Pout: 600W Peak Sync analog.**
- **150W DVB-T/ 200W 8VSB power.**
- **19dB Gain**
- **Thermal Tracking Bias**
- **NXP BLF878 Devices**
- **Alloy 145 copper base**
- **Made in the USA**



Dimension (L x W x H inch) [6.2” x 3.8” x 0.75”]

Absolute Maximum Ratings			
Symbol	Parameter	Value	Unit
Vs	Drain voltage supply	43	V DC
Is	Supply Current	18	A dc
VSWR	Load Mismatch (All phase angles, Id=12A)	10 to 1	
Tc	Base plate operating temperature	0 to +70C	Celsius
RF IN	RF Input	5	Watts

Electrical Specifications				
Characteristics	min	typ	max	unit
Operating Frequency range	470		860	MHz
Power Input		3.5	5	W
Input return loss	-18	-20		dB
Power Gain	18	19		dB
Collector Efficiency		35		%
Collector Current @ 500W PEP		15.5	16.5	A dc
Supply Voltage		42		V dc
Insertion Phase variation (unit to unit)		+/-5.0		degrees
Power gain (unit to unit)		+/-0.5		dB
Two Tone IMD; 500W pep 1MHz sp		-40		dBc
F2 Second Harmonic		-20dB		dB
F3 Third Harmonic		-35dB		dB
Bias Current: Factory set to 1.3A @42V. per device.	1.0	1.3	1.5	A dc
DVB-T Power		150		W
8VSB Power		200		W
Analog Power (see note on next page)		600		W
CW Power (see note on next page)			300	W

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Notice:

This amplifier is not designed for CW signals above 300W. Many of the older transistors with low power density can handle CW at maximum rating. A good example is the BLF861A from NXP.

The new LDMOS 42 and 50V devices are capable of very high peak power which is very important for digital and analog TV; however, these transistors have limited CW capability.

Do not apply a CW signal to this amplifier above 300W or the amplifier may be damaged. Any attempt to judge the performance of this product based on the application of a CW signal is invalid.

Under Analog modulation this pallet can deliver 600W peak sync. This means if you have an average reading power meter and you apply a standard color bar modulation test pattern you can operate up to 275W. Peak Sync power may be calculated by multiplying the average power x 2.2 for a color bar test pattern. In general when we talk about peak sync power it means that the maximum average power allowed is 50% lower.