Italian Technology Broadcast

MD600P- FM

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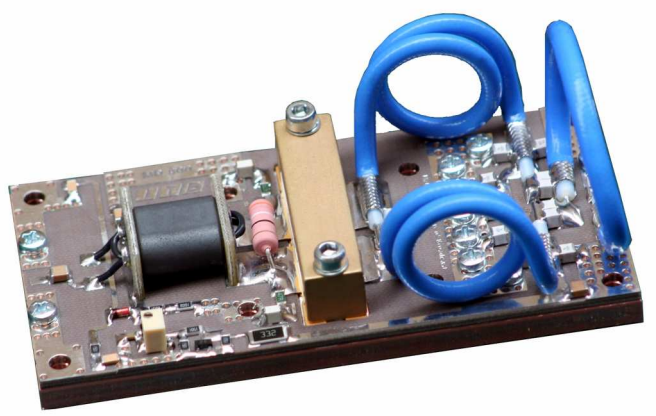
Manufactured and developed for Broadcast applications, this Mosfet technology amplifier guarantees an output power of 600 W on 50 Ω.
If coupled accordingly it is the ideal for 1KW to 10 KW systems and beyond.
Its high efficiency (min 73%) allows considerable energy saving and a reduction in size for all its applications.
Not least important is the size and weight reduction of both radiator and power supplier.
MD600P-FM offers an excellent price/power/quality relationship allowing it to stand out as the best product in its range.

Full Band FM – 600 W

High Power Pallet Amplifier



Dimension: (L x W x H) 100 x 50 x 30 mm

- 87.5 – 108 MHz
- 43 - 45 Volt
- Input / output 50 Ω
- P_{out} : 600 W Max
- Gain : ≥ 22 dB (@ 500W out)
- Class A, AB or C (adjustable)
- ALC input , inhibit
- 5 mm thick Copper Base
- Teflon pc board

ABSOLUTE MAXIMUM RATING **(T case = 25 ℃)**

Symbol		Value	Unit
V_S	Drain Voltage Supply	45	V dc
I_S	Supply Current (total)	17	A dc
VSWR	Load Mismatch (all phase angles, T_C = 25℃ @ 500 W)	5 : 1	
T_{bp}	Base Plate Operating Temperature	70	℃
T_{stg}	Storage Temperature Range	- 20 ÷ + 70	℃

ELECTRICAL SPECIFICATIONS **(T case = 40°C, 50 Ω loaded, Vs = 43.5 V, IA = 14.9 - 18 A , IDQ = 0.2 A total)**

Characteristics	Min	Typ.	Max	Unit
Operating Frequency Range	87.5		108	MHz
Power Input	2.7	3	7.5	Watt
Power Gain	20	21	22	dB
Power Output (fundamental)	500	550	600	Watt
Drain Efficiency (load 50 Ω)	75	76	80	%
Input VSWR	≥ 1.3:1	≥ 1.4 :1	≥ 1.5:1	
Insertion Phase Variation (Unit to Unit)	±2	±3	±4	Degrees
Power Gain Variation (Unit to Unit)		±1		dB
F2 Second Harmonic	- 48	- 48	- 48	dBc
F3 Third Harmonic	- 22	- 23	- 24	dBc

Dynamic test Vs = 43.5 V. , IDQ = 200mA (total) , Copper Base Temperature = 40℃

Freq.MHz	Vdc	I.A	P. In Watt	Pwr out Watt	F2	F3	Gain dB	Efficiency
88.0	+ 43.0	17.8	5.1	600 W *	- 43 dBc	- 22 dBc	≥ 21	≥ 78 %
98.0	+ 43.0	17.7	3.75	600 W *	- 50 dBc	- 23 dBc	≥ 22	≥ 78 %
108.0	+ 43.0	16.7	7.35	600 W *	- 50 dBc	- 23 dBc	≥ 19	≥ 82 %
88	+ 43.0	15.75	2.8	500 W *	- 43 dBc	- 22 dBc	≥ 22	≥ 73 %
98	+ 43.0	15.7	2.65	500 W*	- 50 dBc	- 23 dBc	≥ 22	≥ 74 %
108	+ 43.0	14.83	2.8	500 W *	- 50 dBc	- 23 dBc	≥ 22	≥ 78 %

*** The above data is purely indicative, Italab may vary them without any warning**

* Recommend high ventilation