

Manufactured and developed for Broadcast applications, this Mosfet technology amplifier guarantees an output power of 1KW on 50 Ω.

If coupled accordingly it is the ideal for 1KW to 10 KW systems and beyond.

Its high efficiency (min 70%) allows considerable energy saving and a reduction in size for all its applications.

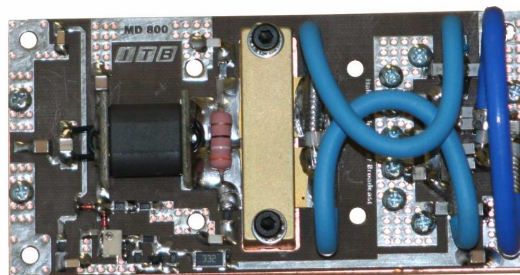
Not least important is the size and weight reduction of both radiator and power supplier.

MD1000P-FM offers an excellent price/power/quality relationship allowing it to stand out as the best product in its range.

- 87.5 – 108 MHz
- 43 - 45 Volt
- Input / output 50 Ω
- P_{out} : 1000 W Max
- Gain : ≥ 25 dB (@ 800W out)
- Class A, AB or C (adjustable)
- ALC input , inhibit
- 7 mm thick Copper Base
- Teflon pc board

Full Band FM – 1000 W

High Power Pallet Amplifier



Dimension: [L x W x H] 100 x 50 x 30 mm

ABSOLUTE MAXIMUM RATING (T case = 25 °C)

Symbol		Value	Unit
V _s	Drain Voltage Supply	45	V dc
I _s	Supply Current (total)	35	A dc
VSWR	Load Mismatch (all phase angles, T _c = 25°C @ 1K W)	5 : 1	
T _{bp}	Base Plate Operating Temperature	70	°C
T _{stg}	Storage Temperature Range	- 20 ÷ + 70	°C

ELECTRICAL SPECIFICATIONS (T case = 40 °C, 50 Ω loaded, Vs = 44 V, IA = 29 - 31 A , IDQ = 0.2 A total)

Characteristics	Min	Typ.	Max	Unit
Operating Frequency Range	87.8		108	MHz
Power Input	6	7	8	Watt
Power Gain	21	23	25	dB
Power Output (fundamental)	1000	1000	1000	Watt
Drain Efficiency (load 50 Ω)	72	75	78	%
Input VSWR	≥ 1.2:1	≥ 1.3 :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	- 50	- 43	- 40	dBc
F3 Third Harmonic	- 20	- 19	- 18	dBc

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

Freq.MHz	Vdc	I.A	P. In Watt	Pwr out Watt	F2	F3	Gain dB	Efficiency
87.8	+ 43.0	30.5	7.0	1 KW *	- 45 dBc	- 18 dBc	22	≥ 76 %
98	+ 43.0	30.5	5.0	1 KW *	- 46 dBc	- 20 dBc	23	≥ 76 %
108	+ 43.0	30.1	5.0	1 KW *	- 47 dBc	- 22 dBc	23	≥ 77 %
88	+ 43.0	26.4	2.6	800	- 45 dBc	- 18 dBc	≥ 24	≥ 70 %
98	+ 43.0	26.3	3.1	800	- 46 dBc	- 20 dBc	≥ 25	≥ 70 %
108	+ 43.0	26.3	3.0	800	- 47 dBc	- 22 dBc	≥ 25	≥ 70 %

* Recommend liquid cooling or high ventilation