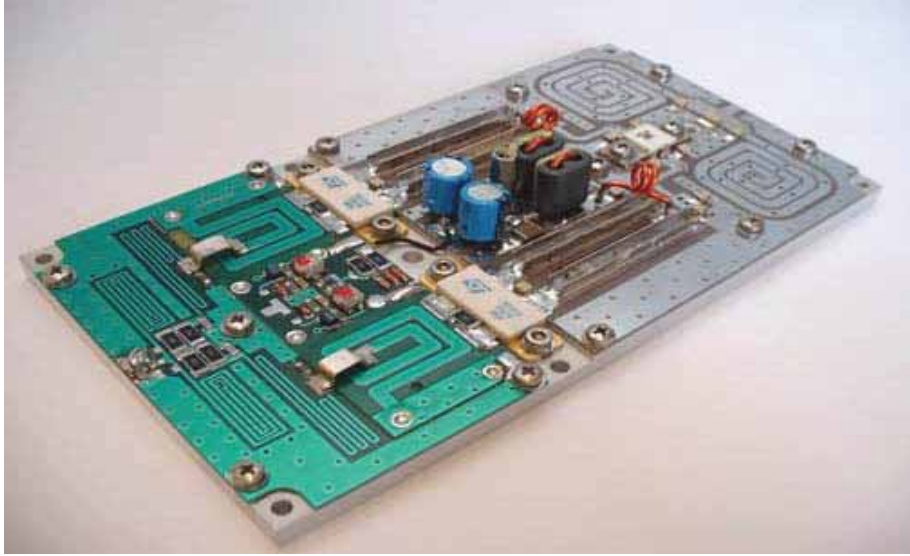


FMAMP500



This picture is a mere example; it does not bind the provided product

550 W - FM Amplifier

Designed for FM radio transposers and transmitters, this amplifier incorporates microstrip technology and MOSFET transistor to enhance ruggedness and reliability.

87.5 ÷ 108 MHz

48 Volts

Input/output 50 Ω

Pout: 550 W min

Gain: 18 dB typ

Class B

Devices: SD2932 or equivalent

Connectorized version available

ABSOLUTE MAXIMUM RATINGS (Device Flange T = 70 °C)

Symbol	Parameter	Value	Unit
Vs	Drain Voltage Supply	52	V dc
Is	Supply Current	24	A dc
VSWR	Load Mismatch (all phase angles, Tc=40°C, Id=17A)	3:1	
Tstg	Storage Temperature Range	-30 + 100	°C
Tc	Operating Temperature	-10 +75	°C

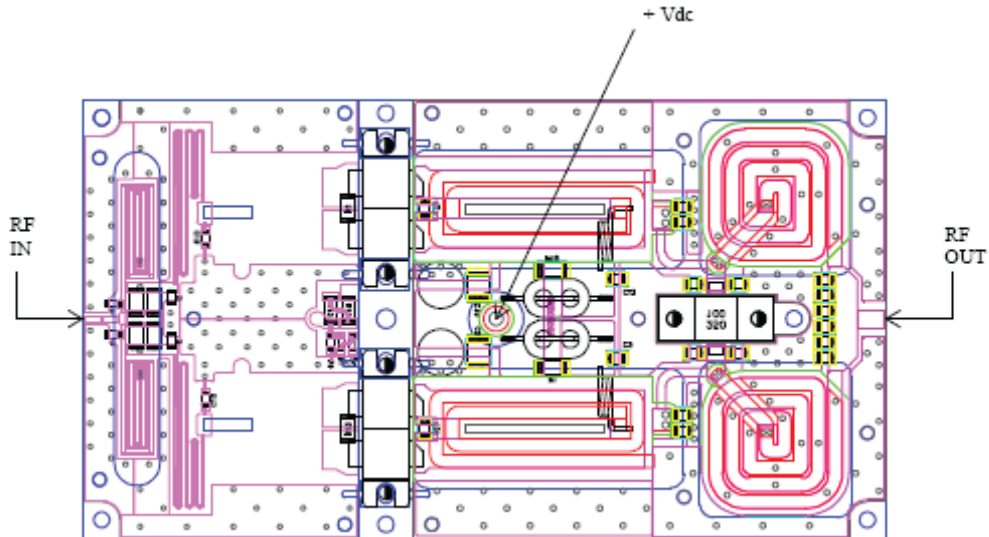


FMAMP500

ELECTRICAL SPECIFICATIONS (Base Plate T. = 45 °C, 50Ω loaded, Vd = 48 V)

ELECTRICAL CHARACTERISTICS at Tbase plate = 25 ° C.				
Characteristics	Min	Typ.	Max	Unit
Operating Frequency Range	87.5		108	MHz
Fundamental Output Power	550	600		W
Power Input		8.5	10	W
Power Gain (550W output)	18	20		dB
Collector Efficiency (Load 50Ω)	60	65		%
Input VSWR		1.3:1	1.5:1	
Insertion Phase Variation (Unit to Unit)		±10		Degrees
Power Gain Variation (Unit to Unit)		±1		dB
F2 Second Harmonic		-35		dB
F3 Third Harmonic		-20		dB

LAYOUT AND CONNECTIONS





FMAMP500

HEATSINK MOUNTING/HARDWARE

1. HEATSINK TOOLING

- Planarity: better than 0.03 mm
- Roughness: typical value 0.8 μ

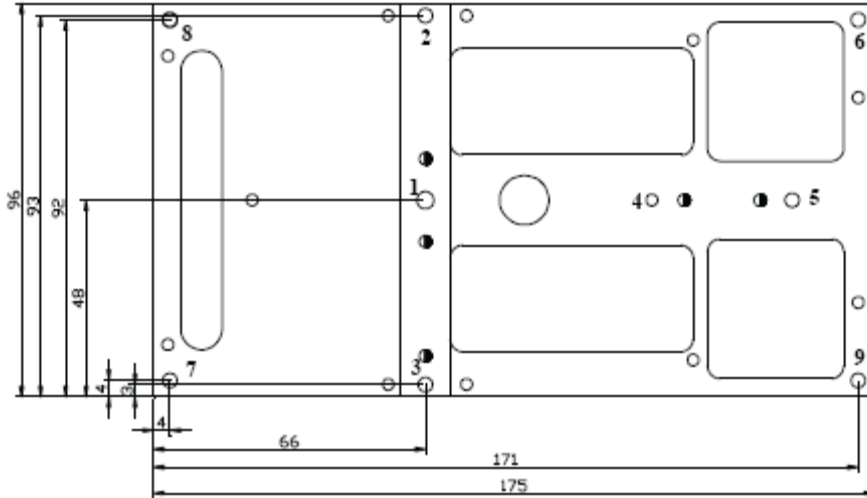
2.THERMAL COMPOUND

- Paste with silicones
- Thickness: optimum between 0.06 mm and 0.15 mm, on the whole back surface of the amplifier.

3.SCREWS

- M4 hexagon socket head cap screws (position 1).
- M3 hexagon socket head cap screws (position 2, 3, 4, 5, 6, 7, 8, 9).
- recommended Torque is 12 Kg . cm (10.5 in . lbs).

4.TIGHTENING ORDER -See next figure:



Dimensions: mm