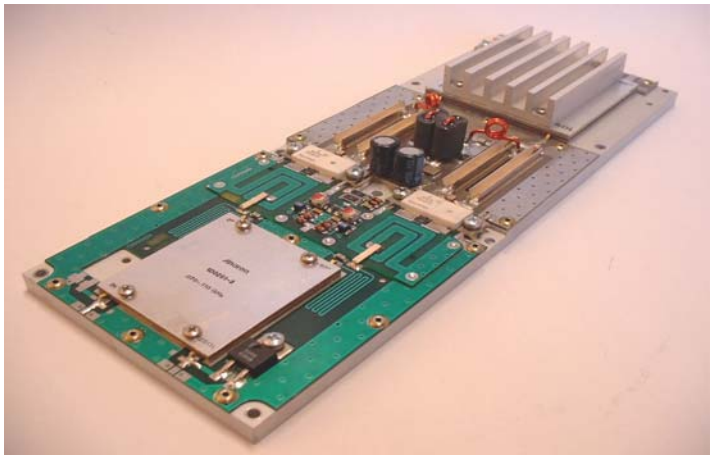
FM500-108S

500 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**
- **P_{out} : 500 W min**
- **Gain : 18 dB typ**
- **Class B**
- **Devices: SD2932 or equivalent**



Dimension (L x W x H): 262 x 96 x 22mm [10,3" x 3,8" x 0,9"]

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

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

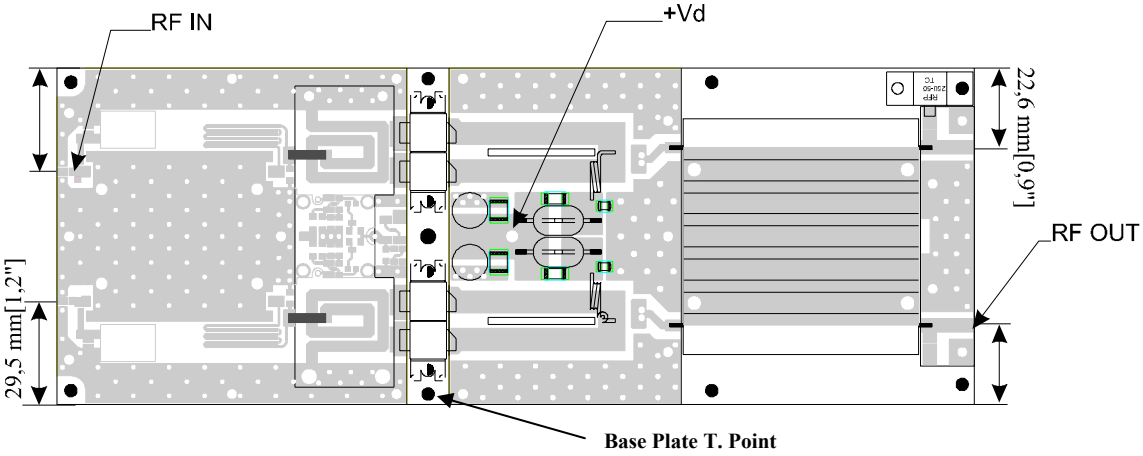
Symbol	Parameter	Value	Unit
V_S	**Drain Voltage Supply**	52	**V dc**
I_S	**Supply Current**	24	**A dc**
VSWR	**Load Mismatch** (all phase angles, Tc=40°C, Id=17A)	3:1	
Tstg	**Storage Temperature Range**	-30 + 100	**°C**
Tc	**Operating Temperature**	-10 +70	**°C**

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

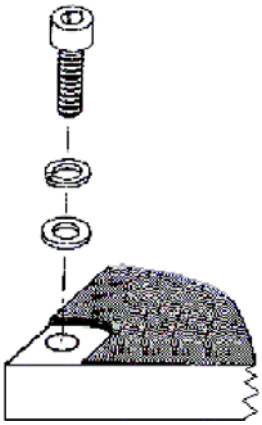
ELECTRICAL CHARACTERISTICS at Tbase plate = 25 ° C.				
Characteristics	**Min**	**Typ.**	**Max**	**Unit**
Operating Frequency Range	87.5		108	MHz
Fundamental Output Power		550		W
Power Input		8.5	10	W
Power Gain (500W output)	18	20		dB
Collector Efficiency (Load 50Ω)	60	65		%
Input VSWR		1.3:1	1.5:1	
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

Conctat Res-Ingenium, +39 0763 316333 Fax +39 0763316002- or visit www.res-ingenium.com for a complete listing.

ELECTRICAL CONNECTIONS



HEATSINK MOUNTING/HARDWARE

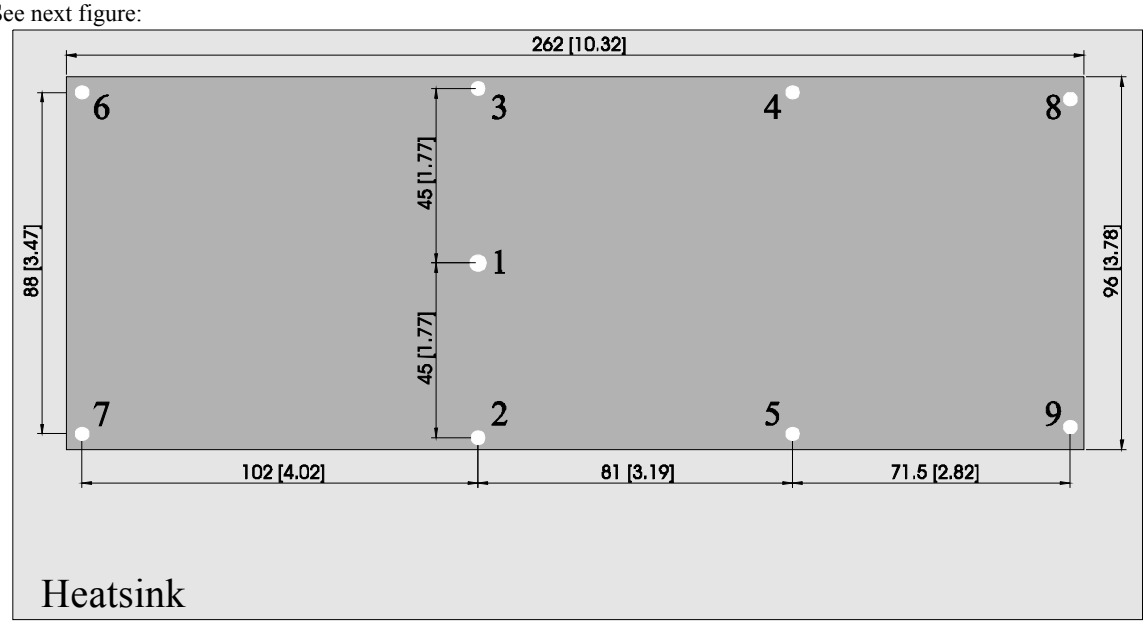


1.HEATSINK TOOLING
-Planarity: typical value 0.8µ
-Roughness: better than 0.03 mm

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).
- The recommended Torque is 12 Kg/cm for M3 type screws and 10 Kg/cm for M2.5 type screws.

4.TIGHTENING ORDER
-See next figure:



Dimensions: mm [inch]

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