



FMAMP550-R

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

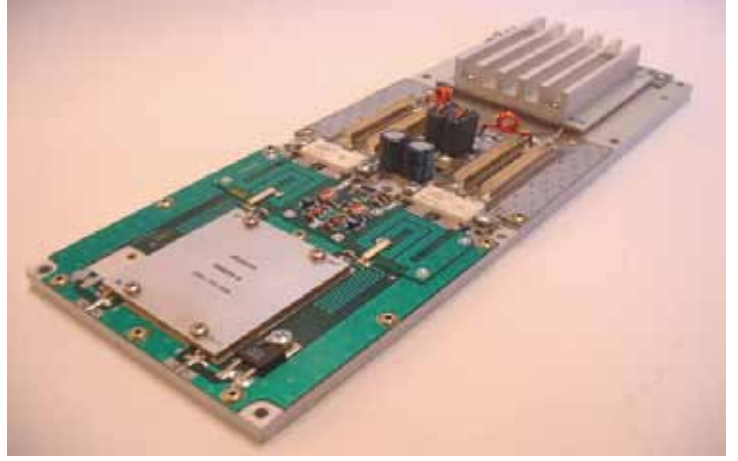
Input/Output 50 Ohm/50 Ohm

P_{out} : 500 W min

Gain : 18 dB typ

Class B

Devices: BLF278 or equivalent



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

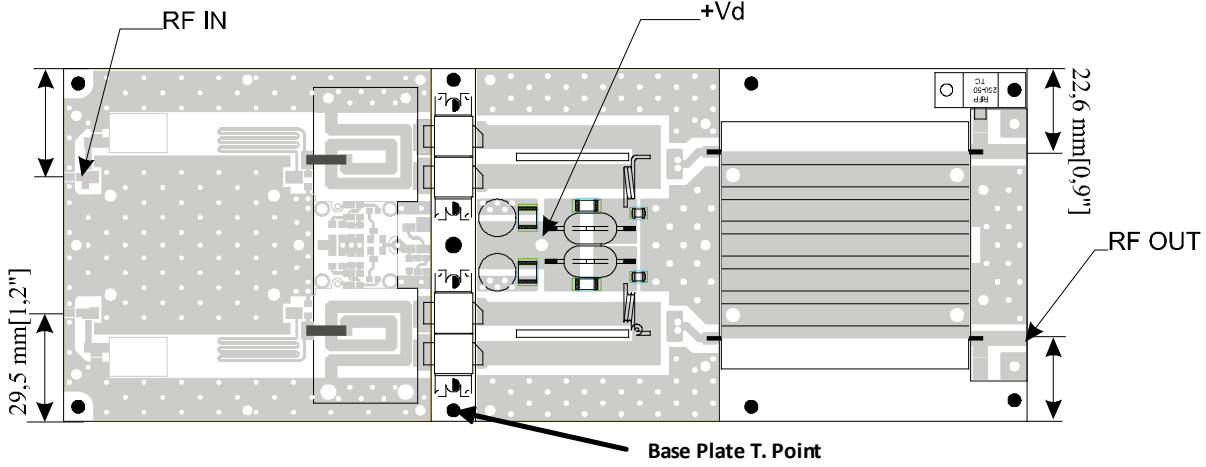
ABSOLUTE MAXIMUM RATINGS (Device Flange T = 70 °C)

| 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, T _c =40°C, I _d =17A) | 3:1 | |
| T _{stg} | Storage Temperature Range | -30 + 100 | °C |
| T _c | Operating Temperature | -10 +70 | °C |

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

| ELECTRICAL CHARACTERISTICS at T _{base 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 50 Ohm) | 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 |

ELECTRICAL CONNECTIONS



HEATSINK MOUNTING/HARDWARE

1. HEATSINK TOOLING

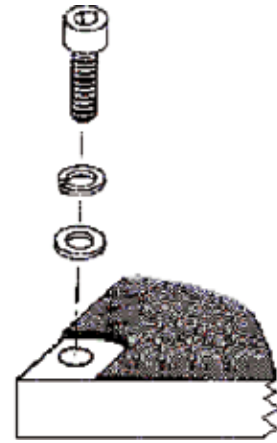
- Planarity: typical value 0.8 μ
- Roughness: better than 0.03 mm

2. THERMAL COMPOUND

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

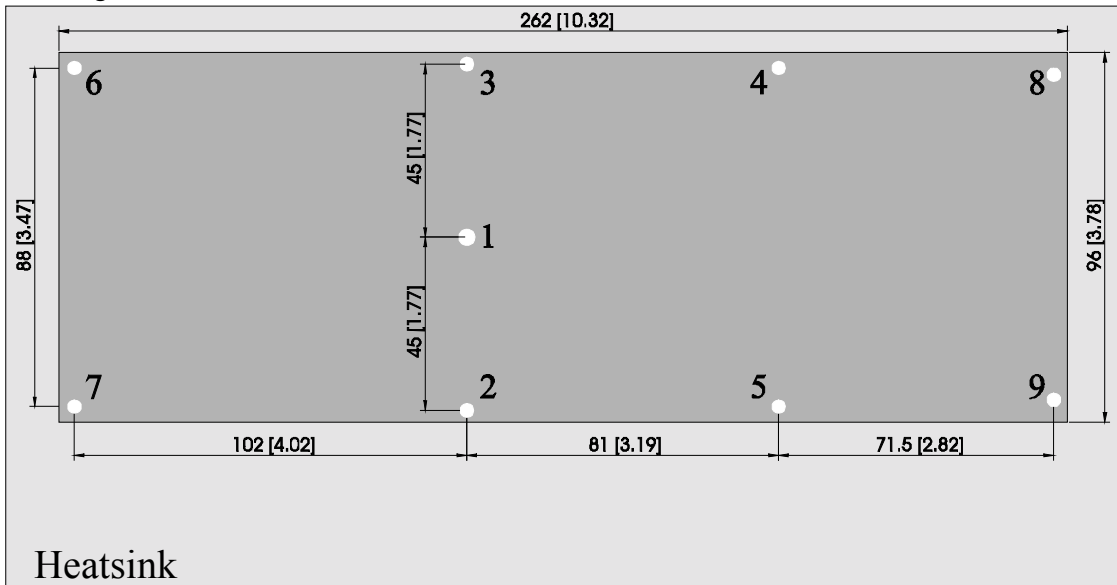
3. SCREWS

- 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 in mm [inch]



FMAMP550-R

IMPORTANT NOTICE

ONAIR MEDYA RESERVE THE RIGHT TO MAKE CHANGES TO THE PRODUCT(S) OR INFORMATION CONTAINED HEREIN WITHOUT NOTICE. ONAIR MEDYA ASSUMES NO RESPONSIBILITY FOR ANY ERRORS WHICH MAY APPEAR IN THIS DOCUMENT.

WARRANTY INFORMATION APPLICABLE TO THE PRODUCT IDENTIFIED HEREIN IS AVAILABLE UPON REQUEST. NOTHING CONTAINED HEREIN SHALL CONSTITUTE A WARRANTY, REPRESENTATION OR GUARANTEE OF ANY KIND. ONAIR MEDYA EXPRESSLY DISCLAIMS ALL OTHER WARRANTIES, EXPRESS AND/OR IMPLIED INCLUDING BUT NOT LIMITED TO WARRANTIES OF MERCHANTABILITY, AND OF FITNESS FOR A PARTICULAR PURPOSE, USE OR APPLICATION.

No part of this document may be copied or reproduced in any form or by any means without the prior written consent of ONAIR MEDYA.

WARNING

ONAIR MEDYA PRODUCTS ARE NOT INTENDED FOR USE IN LIFE SUPPORT APPLIANCES, DEVICES OR SYSTEMS. USE OF ONAIR MEDYA PRODUCT IN ANY SUCH APPLICATION WITHOUT WRITTEN CONSENT IS PROHIBITED