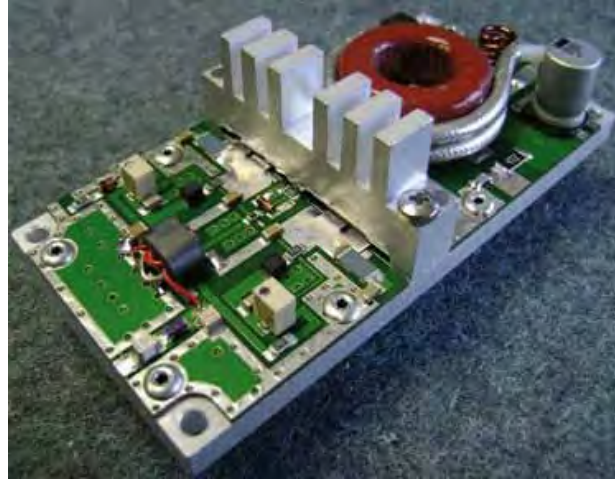




FMAMP550-R 550 W FM PALLET AMPLIFIER



Designed for FM radio transposers and transmitters, this amplifier incorporates microstrip technology and LDMOS device to enhance ruggedness and reliability. The FMAMP550-R has the smallest footprint available on the market for > 500W output power and can be considered the state of art of the FM pallet.

- 87.5 ÷ 108 MHz
- 48 Volts
- Input/Output Impedance : 50 Ohm
- Pout : 550 W min
- I quiescent : 200mA
- Gain : 20 dB typ
- Class : B
- Devices: MRF6V2300NR1 or equivalent
- Configuration Push pull
- Connectorized version available on request

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

Symbol	Parameter	Value	Unit
Vs	Drain Voltage Supply	63	V dc
Is	Supply Current	24	A dc
VSWR	Load Mismatch (all phase angles, Tc=40°C, Id=10A)	3:1	
Tstg	Storage Temperature Range	-30 + 100	°C
Tc	Operating Temperature	-10 +60	°C

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

ELECTRICAL CHARACTERISTICS				
Characteristics	Min	Typ.	Max	Unit
Operating Frequency Range	87.5		108	MHz
Fundamental Output Power	550			W
Power Input		5.5	7.0	W
Power Gain (550W output)	19	20		dB
I Drain		14	15.5	A
Collector Efficiency (Load 50 Ohm)	75	82		%
Input VSWR		1.3:1	1.7:1	
Insertion Phase Variation (Unit to Unit)		±10		Degrees
Power Gain Variation (Unit to Unit)		±1		dB
F2 Second Harmonic	-27	-30		dB
F3 Third Harmonic		-40		dB



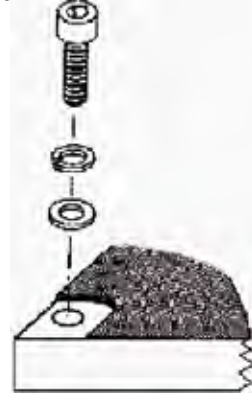
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PHYSICAL LAYOUT AND HEATSINK MOUNTING/HARDWARE

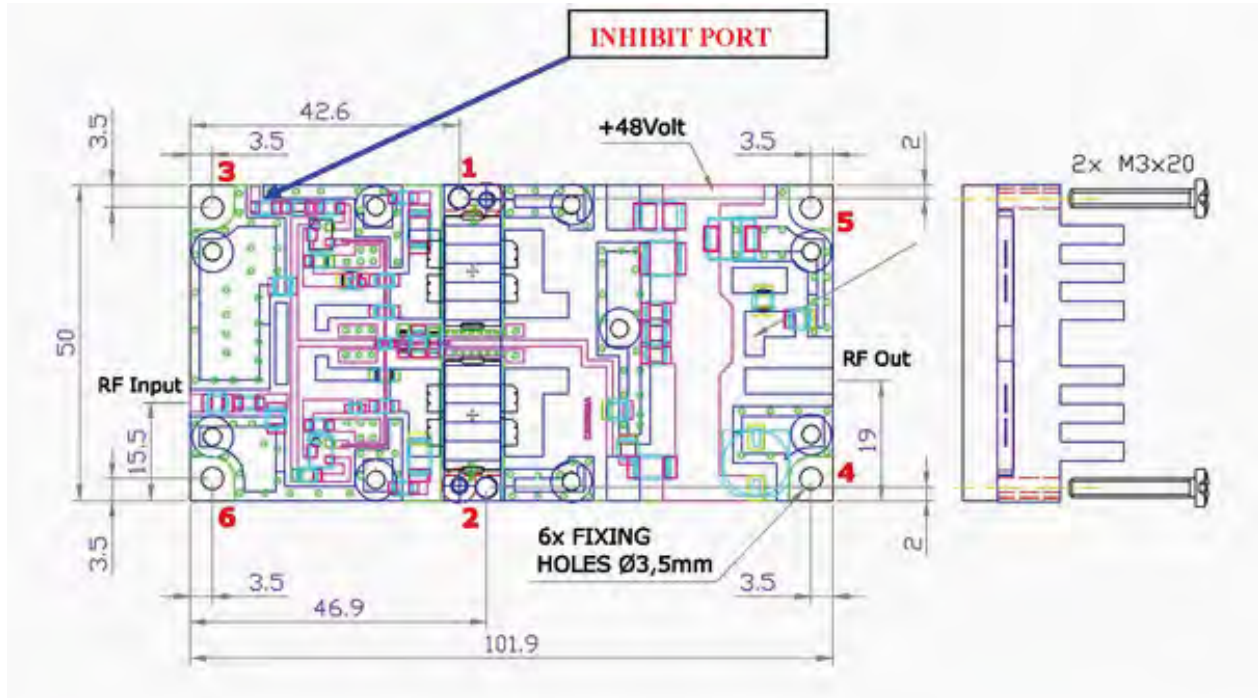
- 1.HEATSINK TOOLING -Planarity: typical value 0.8μ -Roughness: better than 0.03 mm
- 2.THERMAL COMPOUND -Paste with silicones -Thickness: optimum between 0.06 mm and 0.15 mm, on the whole back surface of the amplifier.
- 3.SCREWS -M3 hexagon socket head cap screws or equivalent. -The recommended Torque is 0.9 N-m for M3 or 4-40 type screws as indicated on Freescale Semiconductor Application Note AN3263 Rev. 0. -The screw tightening must be done at ambient temperature.
- 4.TIGHTENING ORDER -See next figure:

WARNING: when mounting this mechanical component, please add thermal compound between its bottom part and the device surface, as described in point 2 of this paragraph.

NOTE: ensure a minimum air flow on the components surface of the pallet.



Contact ONAIR MEDYA, +90 216 540 70 45 Fax +90 216 540 70 46-or visit www.onair.com.tr for a complete listing.



WARNING: Do not apply any negative voltage to the *inhibit port*. It can be only grounded to reduce the output power. To mute the amplifier cut the input signal.



FMAMP550-R 550 W FM PALLET AMPLIFIER

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