

# **THU8090B**

## 95 W Class AB UHF Amplifier

Designed for TV transposers and transmitters, this amplifier incorporates microstrip technology and discrete linear push-pull transistors with diffused emitter ballast resistors to enhance ruggedness and reliability.

• 470 - 860 MHz

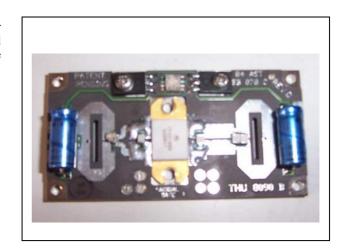
28 Volts

• Input/Output  $50 \Omega - 50 \Omega$ 

• Pout: 95 W Min @ 1dB Comp. (CW)

• Gain: 8 dB Min

Class AB



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

Symbol	Parameter	Value	Unit
$V_s$	Supply Voltage	32	V dc
Is	Current	6.8	A dc
Tstg	Storage Temperature Range	-40 + 100	°C
Tc	Operating Case Temperature	-20 + 70	°C

### ELECTRICAL SPECIFICATIONS (Base Plate Temperature = 45 °C, 50Ω loaded, Vd = 28 V, Id = 3.4A)

Symbol	Parameter	<b>Test Conditions</b>	Value		Unit
			Min	Max	
BW	Bandwidth	Without Returning	470	860	MHz
Gp	Power Gain	Pout = 95W	8		dB
P <sub>out</sub> -	Power Output @ 1db Compression		95		W
VSWR	Mismatch Tolerance	$P_{\text{out}} = 95W$	3:1		-
η	Efficiency	Pout = 95W	50		%
Gr	Gain Flatness	Pout = 95W)		±1	DB

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### HEATSINK MOUNTING/HARDWARE

#### 1.HEATSINK TOOLING

-Planarity: typical value 0.8

-Roughness: better than 0.03 mm

#### 2.THERMAL COMPOUND

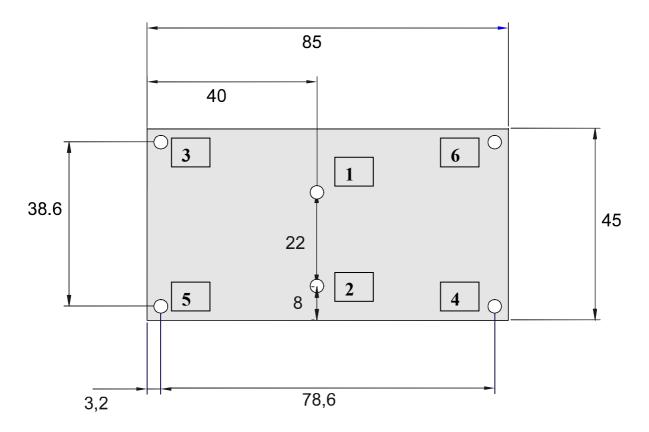
- -Paste with silicones
- -Thickness: optimum between 0.06 mm and 0.15 mm, on the whole back surface of the amplifier.

#### 3.SCREWS

- -8 x M3 Socket head cap screws.
- -8 Split lock washers WZ Ø3 + 8 Flat washers ZU Ø3.
- 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: (measure in mm)



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