

45W LDMos Technology Amplifier

Designed for analog and digital TV transposers and transmitters, this amplifier incorporates microstrip technology and single end LDMos Devices to enhance ruggedness and reliability.

- **470 - 860 MHz**
- **28 ÷ 32 Volt (30V Nominal)**
- **Input/Output: 50 Ohm/50 Ohm**
- **P_{out} 45 Watt (CW)**
- **P_{out} 45 Watt ps Separate Ampl.**
- **P_{out} 30 Watt ps Common Ampl.**
- **P_{out} 10 Watt rms DVB**
- **Gain : 13 dB min.**
- **Class AB**
- **Devices: MRF9060 or equivalent**
- **Connectorized version available**
- **APL corrector on board**



Dimensions (LxWxH) 136x78x20mm (5.36"x3.07"x0.79")

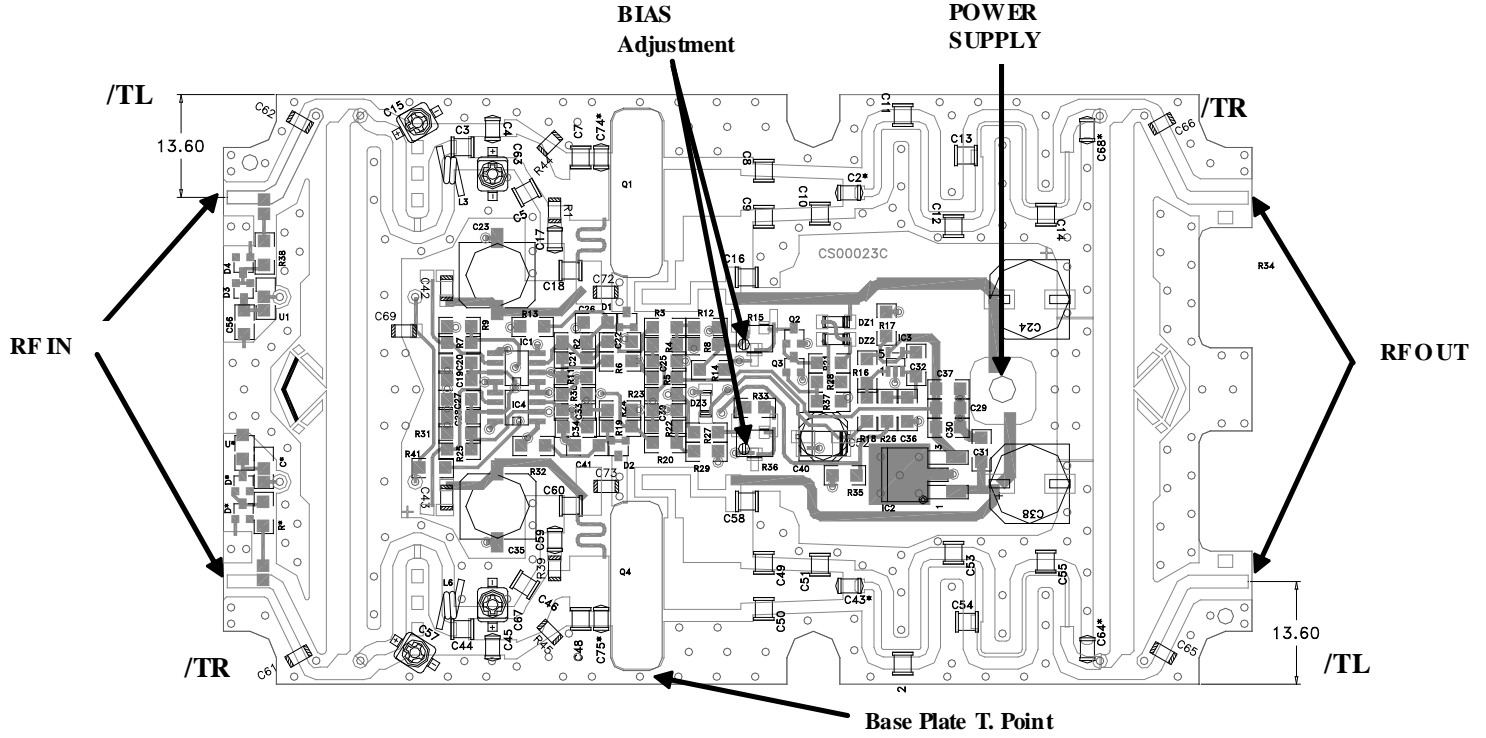
This picture is a mere example, it does not bind the provided product

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

Symbol	Parameter	Value	Unit
V _S	Voltage Supply	35	V dc
I _S	Current Supply	5	A dc
T _{stg}	Storage Temperature Range	-30 + 100	°C
T _c	Operating Case Temperature	0 + 75 ¹	°C
ψ	VSWR max	3:1 all phase	

ELECTRICAL SPECIFICATIONS (Base Plate T. = 45 °C, 50 Ohm loaded, V_d = 30 V)

Symbol	Parameter	Test Conditions	Value			Unit
			Min	Typ.	Max	
BW	Bandwidth	P _{out} = 45 W (CW)	470		860	MHz
G _p	Power gain	P _{ref} = 45 W (CW)	13	15	-	dB
P _{out} - 1dB	Power Output @ 1dB	Referred to P _{out} = 5W (CW)	45	-	-	W
I _q *	Supply Current	P _{out} = 0 W - Total *	-	-	1	A
I _{tot} *	@ P_{Max}		-		4	A
Ω	Input/Output	50 Ohm				Ohm
I _{rl}	Input return	P _{out} = 45 W CW	15	18	-	dB
	Load mismatch	P _{ref} = 45 W CW, f = 860MHz, load VSWR = 2:1, all phase angles	No degradation in P _{out}			
Gr	Gain Flatness	P _{ref} = 45 W CW, BW: 470-860MHz		±0.	±1	dB
η	Drain Efficiency	P _{out} = 45 W (CW)	35	45	-	%
	P_{out} separate ampl.	Sync. Compression < 1dB without correction	45			
	P_{out} common ampl.	P _{out} 30W ps common ampl. Dual sound, with Red Field sound 1 @ -13dB and sound 2 @ -20dB without pre-correction	45	50		
	P_{out} DVB-T	P _{out} 10Wrms without pre-correction	28	30		



NOTE. In response to customer request, this pallet has been designed to allow two different positions of IN/OUT connections: /TL = connection on the left side, /TR = connection on the right side.

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

- 4 x M3 -Cross head screws (position 5, 6, 7, 8) – 4 x M2.5 (position 1, 2, 3, 4).
- The recommended Torque is 12 Kg/cm for M3 type screws and 10 Kg/cm for M2.5 type screws.

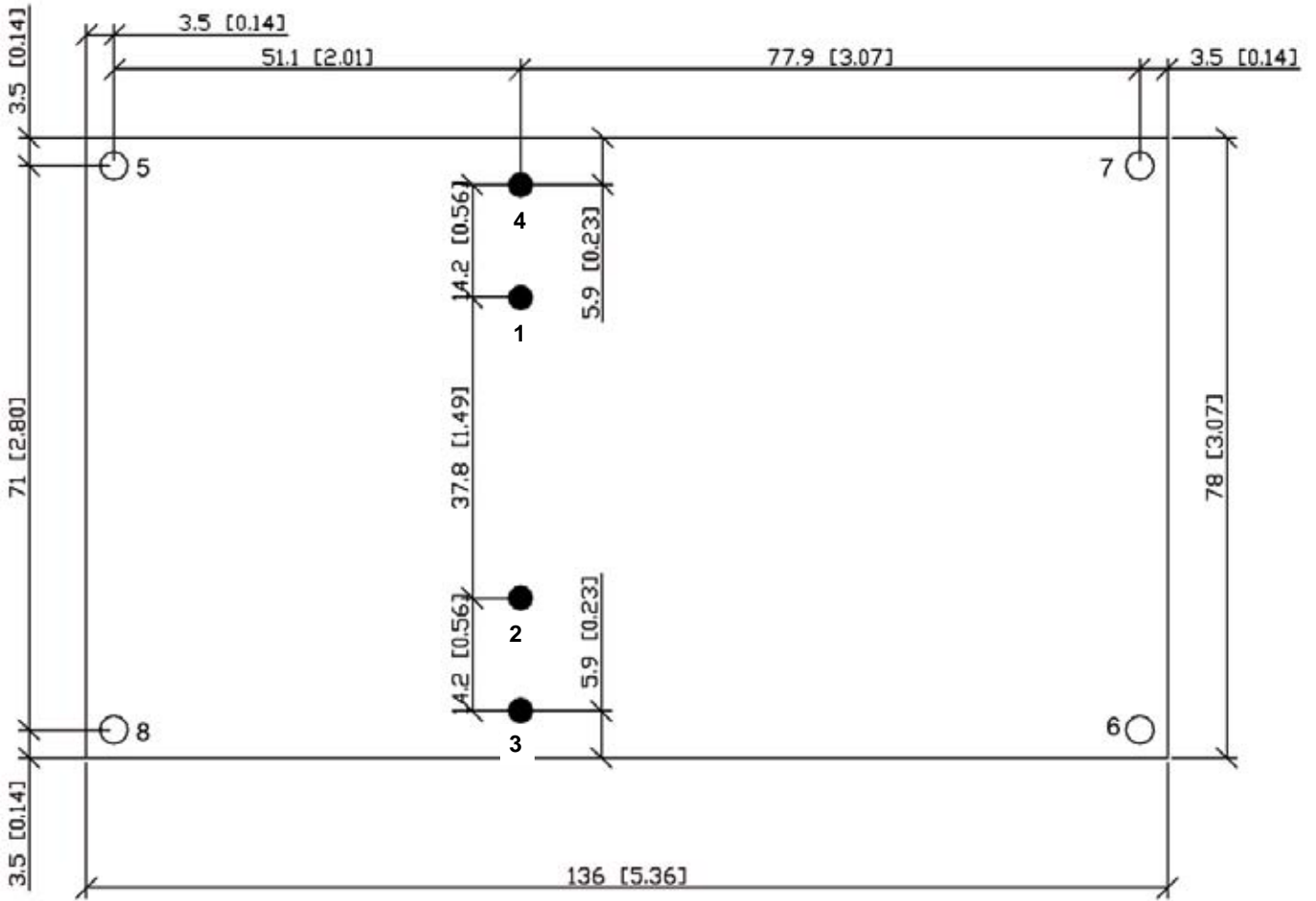
4. TIGHTENING ORDER

- See next figure:





UHFAMP45-R



Dimensions: mm[inch]



UHFAMP45-R

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