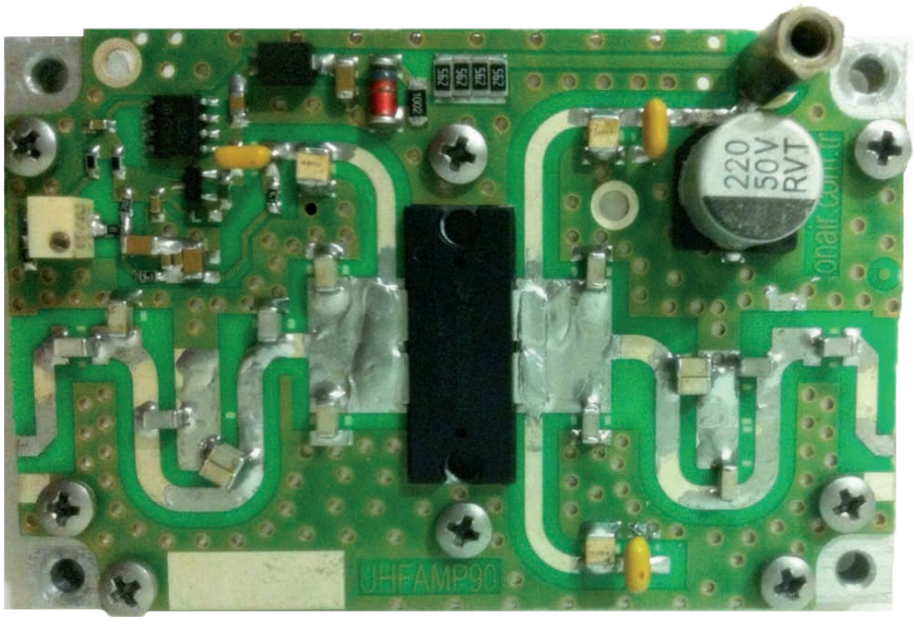
UHFAMP90

90 W LDMOS POWER AMPLIFIER



Designed for analog and digital TV transposers and transmitters, this amplifier incorporates microstrip technology and single ended LDMOS devices to enhance ruggedness and reliability.

- 170 - 230 MHz
- 48/50 Volt (49 Nominal)
- Input Impedance: 50 Ohm
- Output Impedance: 50 Ohm
- Pout: 90 W (CW)
- Pout: 16 W rms DVB
- Gain: 19.4 dB min.
- Class: AB
- Devices: MRF6V3090N
- ROHS Compliant

Technical Parameters

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

Symbol	Parameter	Value	Unit
Vs	Voltage Supply	50	V dc
Is	Supply Current	5	A dc
Tstg	Storage Temperature Range	-30 / +123	°C
Tc	Operating Case Temperature	0 / +125	°C
Ψ	VSWR max	3:1 all phase angles	

Electrical Specifications (Base Plate T. = 45 °C, 50 Ω loaded, Vd = 30 V)

Parameter (Symbol)	Min	Typ.	Max	Unit	Test Conditions
Bandwith (BW)	470		862	MHz	Pout = 80 W (CW)
Power Gain (Gp)	19.4	20		dB	Pref = 80 W (CW)
Power Output @1dB Compression	90			W	
Supply Current (I_q)			0.45	A	Pout = 0 W - Total
@P_{max} (I_{tot})			4	A	
Input / Output (Ω)				Ohm	50 Ohm
Input Return Loss (Irl)	6			dB	Pout = 80 W CW
Gain Flatness (Gr)		±0.5	±1	dB	Pref = 80 W CW, BW: 470-860MHz
Drain Efficiency (η)	35	40		%	Pout = 80 W (CW)
Pout DVB-T	25	30			Pout 16Wrms without precorrection

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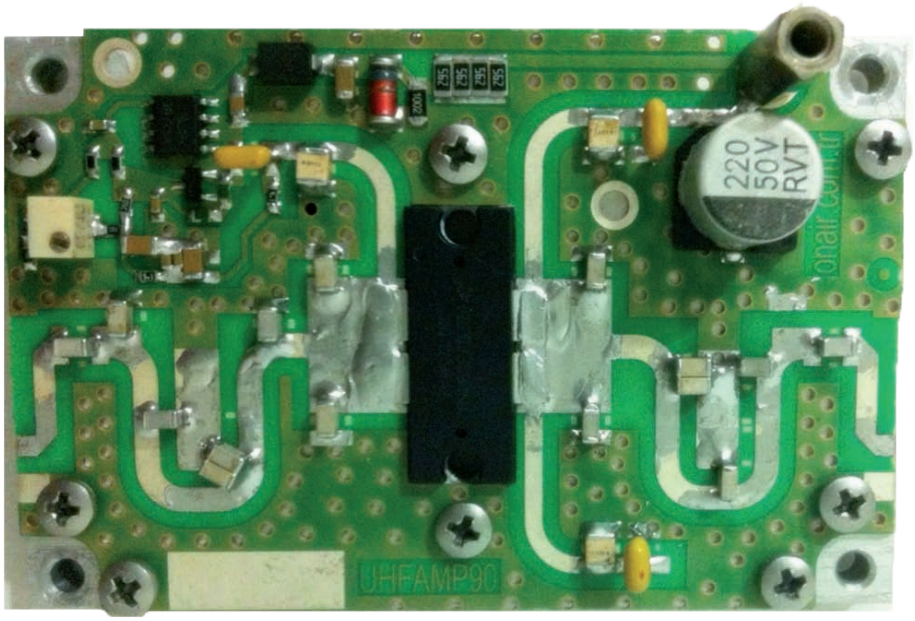

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