

HF 10-0130

10W HF Amplifier

Designed for $\rm \bar{H}F$ band, this amplifier incorporates microstrip technology and MOSFET transistor to enhance ruggedness and reliability

- 0.5 ÷ 32 MHz
- 24 / 50 Volts
- Input / Output 50 Ohm
- Pout : 10 W min
- Gain : 22 dB typ.
- Class A
- Devices: BLF278 or equivalent
- Switching Power Supply Included



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
Vs	Drain Voltage Supply	52	V dc
Is	Supply Current	2.5	A dc
VSWR	Load Mismatch (all phase angles, Tc=40°C, @10W)	3:1	
Tstg	Storage Temperature Range	-30 + 100	°C
Tc	Operating Temperature	-20 +60	°C

ELECTRICAL SPECIFICATIONS (Base Plate T. = 45 °C, 50Ω loaded, Vd = 24 V)

Characteristics	Min	Typ.	Max	Unit
Operating Frequency Range	0.5		32	MHz
Fundamental Output Power	10			W
Power Gain	21	22		dB
Input VSWR		1.3:1	1.5:1	
Gain Compression (@10W, ref 5W)		0.2	0.3	dB

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HF10-0130 Layout and Connections



Note: For power supplies in the range 30 to 50 Vdc, use DC power input A. Alternatively a 24 Vdc power supply can be used connecting to DC power input B.

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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

- 6 x M3 Cross head screws.
- 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]

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