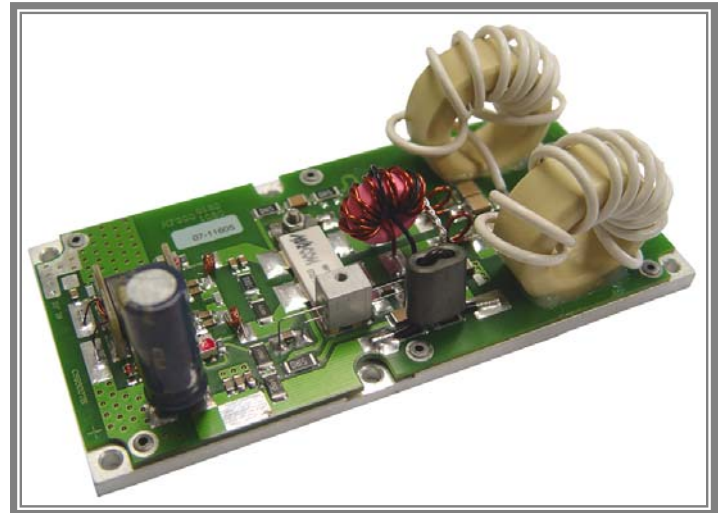


### **TECHNICAL INFORMATION**

Designed for HF band, this amplifier incorporates microstrip technology and MOSFET transistor to enhance ruggedness and reliability.

- ◆ 1 ÷ 30 MHz
- ◆ 50 Volts
- ◆ Input / Output 50 Ohm
- ◆ Pout : 300 W min
- ◆ Gain : 22 dB typ.
- ◆ Class AB
- ◆ Devices: MRF151G or equivalent
- ◆ Size: 5.70" x 2.75" x 1.97"



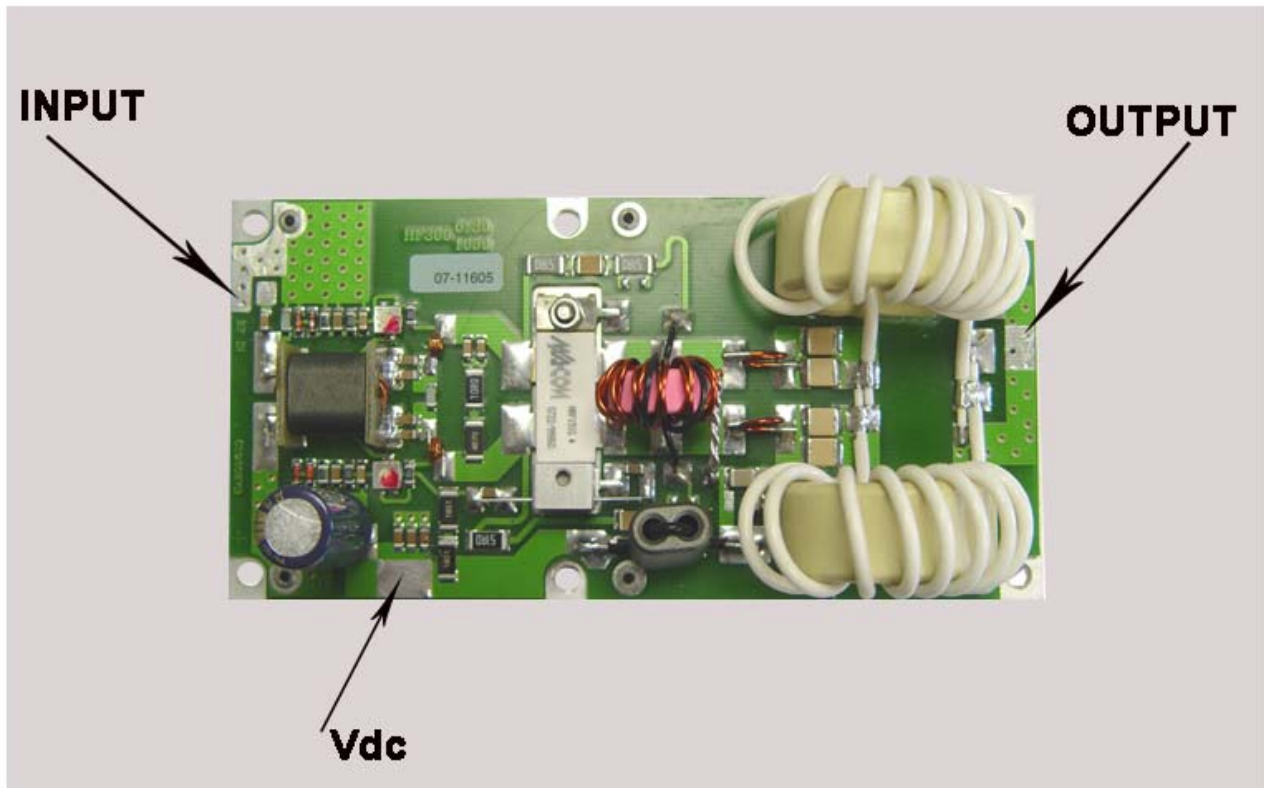
### **TECHNICAL SPECIFICATIONS**

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

Symbol	Parameter	Value	Unit
Vs	Drain Voltage Supply	52	V dc
Is	Current Supply	13	A dc
Tstg	Storage Temperature Range	-30 + 100	°C
Tc	Operating Temperature	-20 + 60	°C
VSWR	Load Mismatch (all phase angles, Tc=40°C, @300W)	3:1	-

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

Characteristics	Min	Typ	Max	Unit
Operating Frequency Range	1		30	MHz
Fundamental Output Power	300			W
Power Input		2.0	3.0	W
Power Gain	20	22		dB
Drain Efficiency (Load 50Ω)	52	55		%
Input VSWR			1.5:1	
Insertion Phase Variation (Unit to Unit)		±10		Degrees
Power Gain Variation (Unit to Unit)		±1		dB
Gain Compression (@300W, ref 100W)		0.4	0.6	dB
F2 Second Harmonic		-35		dB
F3 Third Harmonic		-20		dB



### HEATSINK MOUNTING/HARDWARE

#### 1. HEATSINK TOOLING

- Planarity: better than 0.03 mm
- Roughness: typical value 0.8

#### 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 or 4/40" UNC Cross head screws.

#### 4. TIGHTENING ORDER

- See next figure:

