

# M-A075 RF Amplifier Module

# 75 Watts RF Power For:

- Ultrasonic
- Testing
- Laboratory use
- 300 KHz to 35 MHz
- Instantaneous Bandwidth
- 75 W 1dB Compression
- Solid State



The M-A075 Amplifier Module is a rugged source of RF power, useful for ultrasonics, laser modulation, RFI/EMI, plasma equipment and general laboratory applications. This module is designed to be integrated in to a system. It requires a DC voltage input and forced air cooling. The M-A075 represents E&I's commitment to providing RF power amplifiers of the highest quality, durability and ruggedness.

#### **FLEXIBILITY:**

The M-A075 produces 75 Watts of Class A linear power output over the entire frequency range from 300 KHz to 35 MHz. It has very low harmonic distortion along with low IMD products. Operation over the band is achieved without the need for any band switching or indeed any adjustments. The power gain is rated at 50 dB with a typical gain flatness of +/- 1.5 dB

#### **RUGGEDNESS:**

The M-A075 is built to withstand VSWR load condition at power levels of up to 75 watts. The RF power is delivered by rugged DMoS FETs, de-rated to provide for excellent MTBF figures.

## M-A075 POWER AMPLIFIER

**Class of Operation** 

Class A

Frequency Range

300 KHz to 35 MHz

Rated Power Output

75 Watts (P1dB)

**Saturated Power Output** 

100 - 150 Watts

Gain

50 dB (nominal)

Gain Flatness

+/- 1.5 dB

Input Power for rated Pout

1 mW Max

Input Impedance / VSWR

 $50\Omega$  / 1.5:1 maximum

Output Impedance / VSWR

 $50\Omega / 2:1$  maximum

Harmonic Level

< -25dBc @ 75 Watts

Ruggedness

oo:1 VSWR (to 75W)

### **Stability**

Unconditional into any passive load

#### **Protection**

Input: Unit will withstand input signal of +13 dBm without damage (1.0 V rms) max.

### Third Order Intercept Point

IP3 ~ 60 dBm

**DC** Input

24 V @ 2.2 A 42 Vdc @ 8.0 A

#### **Temperature Range**

0 - 40 C

#### Cooling

Forced air required to ensure heat-sink temperature is maintained at 85C or below

## Weight

12 lbs / 5.5 kg

#### **Dimensions**

To fit in a space of: 6 X 4.5 X 10 inches 15.2 X 11.5 x 25.4 cm.



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