

# 240L POWER AMPLIFIER

# 40 Watts RF Power For:

- Ultrasonic
- Testing
- Laboratory use



- 10 KHz to 12 MHz
- Instantaneous Bandwidth
- 40 W 1dB Compression
- Solid State
- Air Cooled

The 240L Amplifier is a rugged source of RF power, useful for ultrasonics, laser modulation, RFI/EMI, plasma equipment and general laboratory applications. The 240L represents E&I's commitment to providing RF power amplifiers of the highest quality, durability and ruggedness.

#### **FLEXIBILITY:**

The 240L produces 40 Watts of Class A linear power output over the entire frequency range from 10 KHz to 12 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

The 240L is compatible with most signal generators, frequency synthesizers, sweep generators and other laboratory signal sources. It accurately reproduces all waveforms within its power and frequency ranges: AM. FM, SSB, pulsed and other complex modulation schemes.

#### **RUGGEDNESS:**

The 240L is built to withstand a 13 dBm input (1.0 Volt RMS) for any VSWR load condition. The internal switched mode power supply is very conservatively rated, in order to facilitate operation over a large range of line conditions and temperatures. The forced air cooling provides for low internal temperatures, providing long term reliability. The RF power is delivered by rugged DMoS FETs, de-rated to provide for excellent MTBF figures.

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### **Class of Operation**

Class A

# Frequency Range

10 KHz to 12 MHz

## **Rated Power Output**

40 Watts (P1dB)

#### Saturated Power Output

10 KHz to 12 MHz > 100 W

#### Gain

50 dB (nominal)

#### Gain Flatness

+/- 1.5 dB

#### Input Power for rated Pout

0.4 mW / -4dBm

## Input Impedance / VSWR

 $50\Omega$  / 1.5:1 maximum

#### Output Impedance / VSWR

 $50\Omega$  / 2:1 maximum

#### Harmonic Level

< -25dBc

#### Ruggedness

oo:1 VSWR

#### **Stability**

Unconditional into any passive load or reactive load

#### **Protection**

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

#### Front Panel Display

Indicates forward and reflected power

#### Third Order Intercept Point

IP3 ~ 59 dBm

# **AC** Input

100 - 240 VAC 47-63 Hz. Current at rated power 3 A @ 120V 1.5 A @240V

#### Temperature Range

0 - 40 C

#### Cooling

Forced air

#### Weight

32.5 lbs (14.8 Kg)

#### Dimensions (H x W x D)

5.3" x 16.5" x 18.4" 134.5 mm x 420 mm x 467 mm

