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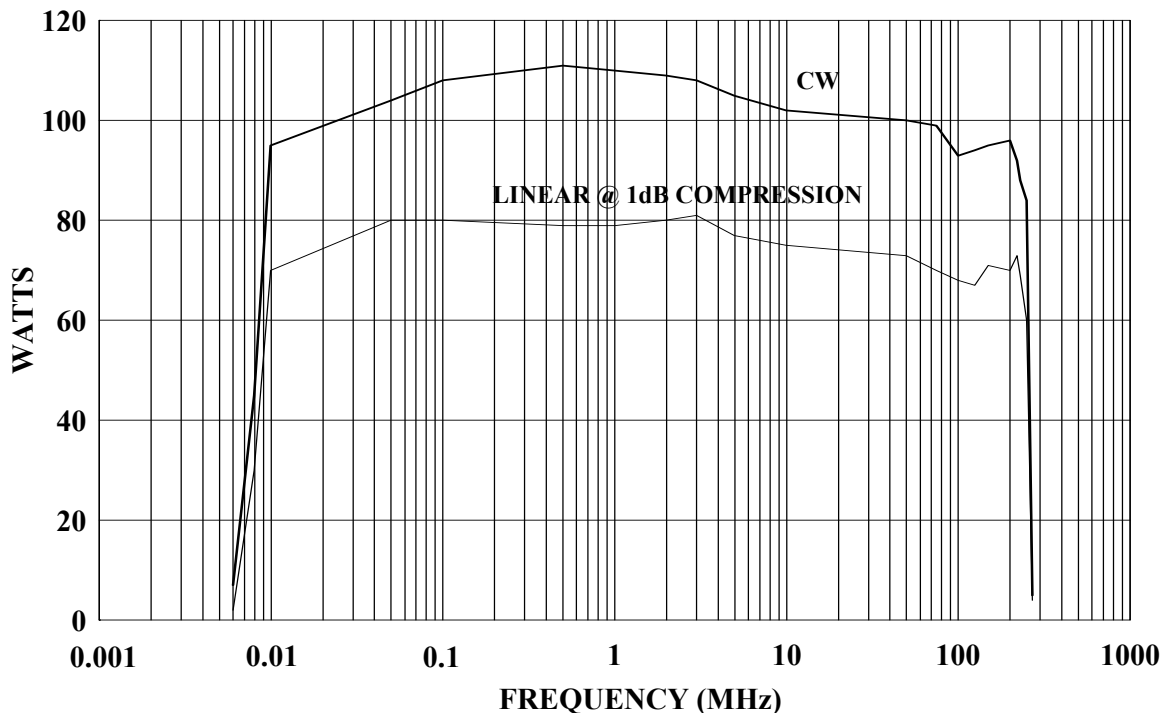
MODEL 75A250
75 WATTS CW
10 kHz - 250 MHz
with Versions M1-M7

The Model 75A250 amplifier is a self-contained, broadband unit designed for laboratory applications where instantaneous bandwidth, high gain and moderate power output are required. Utilization of push-pull MOSFET circuitry lowers distortion, improves stability and allows operation into any load impedance without damage. The Model 75A250, when used with an RF sweep generator, will provide a minimum of 75 watts of swept power.

The Model 75A250 includes a front panel control which permits the operator to conveniently set the amplifier's desired output level. Housed in a stylish contemporary enclosure, the Model 75A250 provides readily available RF power for typical applications such as RF susceptibility testing, antenna and component testing, watt meter calibration, and use as a driver for higher power amplifiers.

The 75A250 utilizes a switching power supply with a universal, autoranging input which will automatically accept from 90 to 135 VAC or from 180 to 270 VAC at 47 to 63 Hz.

75A250 TYPICAL POWER OUTPUT



SPECIFICATIONS
Model 75A250

POWER OUTPUT, CW

Nominal..... 100 watts
 Minimum..... 75 watts
 Linear @ 1 dB compression..... 50 watts minimum

FLATNESS..... ± 1.0 dB maximum

FREQUENCY RESPONSE..... 10 kHz - 250 MHz instantaneously

INPUT FOR RATED OUTPUT..... 1.0 milliwatt maximum

GAIN (at maximum setting)..... 49 dB minimum (See Model Configurations)

GAIN ADJUSTMENT (continuous range)..... 18 dB minimum

INPUT IMPEDANCE..... 50 ohms, VSWR 1.5:1 maximum

OUTPUT IMPEDANCE..... 50 ohms, VSWR 2.0:1 maximum

MISMATCH TOLERANCE *..... 100% of rated power without foldback. Will operate without damage or oscillation with any magnitude and phase of source and load impedance.

MODULATION CAPABILITY..... Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal

NOISE FIGURE (above 1.0 MHz)..... 16 dB typical; 6 dB available, see M2, M5, M6 & M7 below

HARMONIC DISTORTION..... Minus 20 dBc maximum at 50 watts

THIRD ORDER INTERCEPT POINT..... 57 dBm typical

PRIMARY POWER..... 90-135/180-270 VAC
 47 to 63 Hz, single phase 400 watts maximum

RF CONNECTOR (Type)..... Type N female
 (Location)..... See Model Configurations

COOLING..... Forced air (self contained fans)

* See Application Note #27

MODEL CONFIGURATIONS

MODEL NUMBER	RF CONNECTOR LOCATION	GAIN CONTROL	INSTRUMENT CASE	WEIGHT	SIZE (W x H x D)
75A250	Front Panel	Yes	Yes	15.9 kg (35.0 lb)	50.3 x 15.5 x 30.0 cm 19.8 x 6.1 x 11.80 in
75A250M1	Rear Panel	Yes	No	11.4 kg (25.0 lb)	48.3 x 13.5 x 29.3 cm 19.0 x 5.3 x 11.5 in
75A250M2*	Front Panel	No	Yes	15.9 kg (35.0 lb)	50.3 x 15.5 x 30.0 cm 19.8 x 6.1 x 11.80 in
75A250M3	Rear Panel	Yes	Yes	15.9 kg (35.0 lb)	50.3 x 15.5 x 30.0 cm 19.8 x 6.1 x 11.80 in
75A250M4	Front Panel	Yes	No	11.4 kg (25.0 lb)	48.3 x 13.5 x 29.3 cm 19.0 x 5.3 x 11.5 in
75A250M5*	Rear Panel	No	Yes	15.9 kg (35.0 lb)	50.3 x 15.5 x 30.0 cm 19.8 x 6.1 x 11.80 in
75A250M6*	Rear Panel	No	No	11.4 kg (25.0 lb)	48.3 x 13.5 x 29.3 cm 19.0 x 5.3 x 11.5 in
75A250M7*	Front Panel	No	No	11.4 kg (25.0 lb)	48.3 x 13.5 x 29.3 cm 19.0 x 5.3 x 11.5 in

*When the Gain Control is removed, the noise figure is 6dB (typical)