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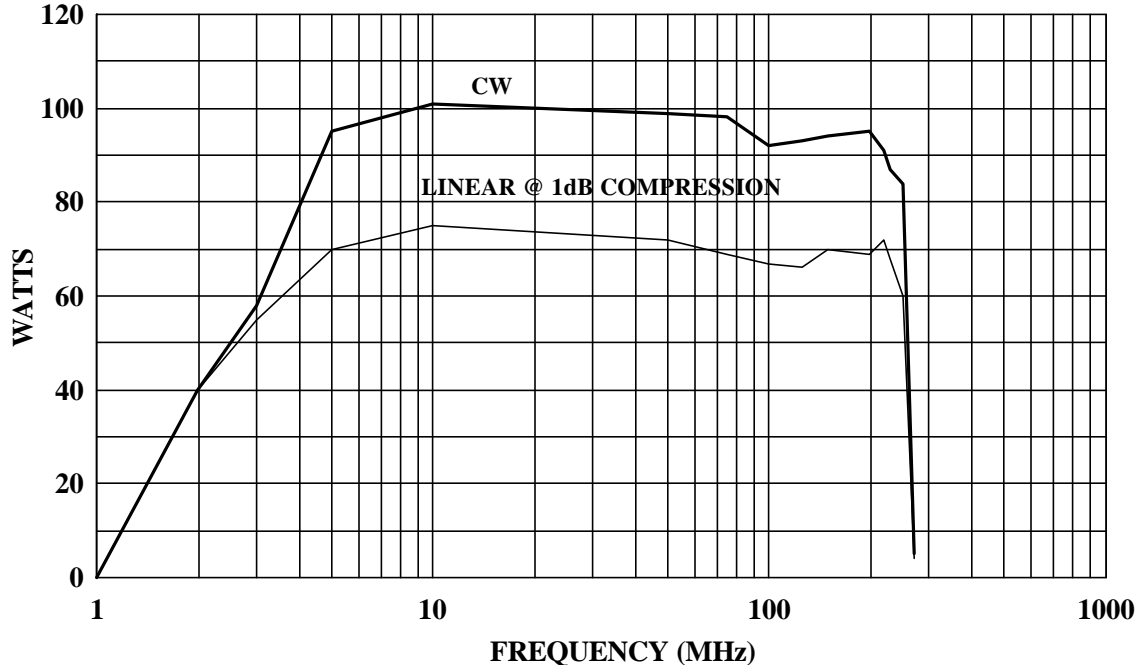
MODEL 75AP250
75 WATTS CW
5 - 250 MHz

The Model 75AP250 is a self-contained, air cooled, broadband, solid state amplifier designed for applications where pulsed, high power, RF outputs are required. For NMR applications, the amplifier incorporates high speed blanking and gating circuitry, which generally reduces output noise and increases R.F. on/off attenuation. This feature is especially suited for NMR applications as well as more general applications. Push-pull MOSFET circuitry is utilized in all high power stages in the interest of lowering distortion and improving stability. The Model 75AP250, when used with an RF sweep generator, will provide a minimum of 75 watts of swept power.

Also included is a front panel gain control which permits the operator to conveniently set the desired power output level. High efficiency, universal input, switching power supplies provide reliable DC to all internal sub-assemblies.

Housed in a stylish, contemporary enclosure, the Model 75AP250 provides readily available RF power for typical applications such as NMR, RF susceptibility testing, antenna and component testing, watt meter calibration, ultrasonics and as a driver for higher power amplifiers.

75AP250 TYPICAL POWER OUTPUT



SPECIFICATIONS
Model 75AP250

POWER OUTPUT, CW

Nominal94 watts
Minimum75 watts
Linear @ 1dB compression.....50 watts minimum

FLATNESS.....±1.0 dB maximum

FREQUENCY RESPONSE.....5 - 250MHz instantaneously

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

GAIN (at maximum setting).....49 dB minimum

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

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

OUTPUT IMPEDANCE.....50 ohms, nominal

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 CAPABILITYWill faithfully reproduce AM, FM, or pulse modulation appearing on the input signal

HARMONIC DISTORTIONMinus 20 dBc maximum at 50 watts

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

PULSE MODE CHARACTERISTICS

Signal (into 50 ohms).....+2.5 to 6.0 VDC
Rise Time.....1.0 microseconds maximum
Fall Time.....1.0 microseconds maximum
RF Rise/Fall Time10 nanoseconds maximum

PRIMARY POWER.....90-135 / 18-270 VRMS Autoranging
47 - 63 Hz
600 watts maximum

RF CONNECTORSType N female
Pulse input connectorType BNC female

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

WEIGHT.....13.6 kg (30 lb)

SIZE (WxHxD)50.3 x 15.5 x 30.0 cm
19.8 x 6.1 x 11.8 in

* See Application Note #27