

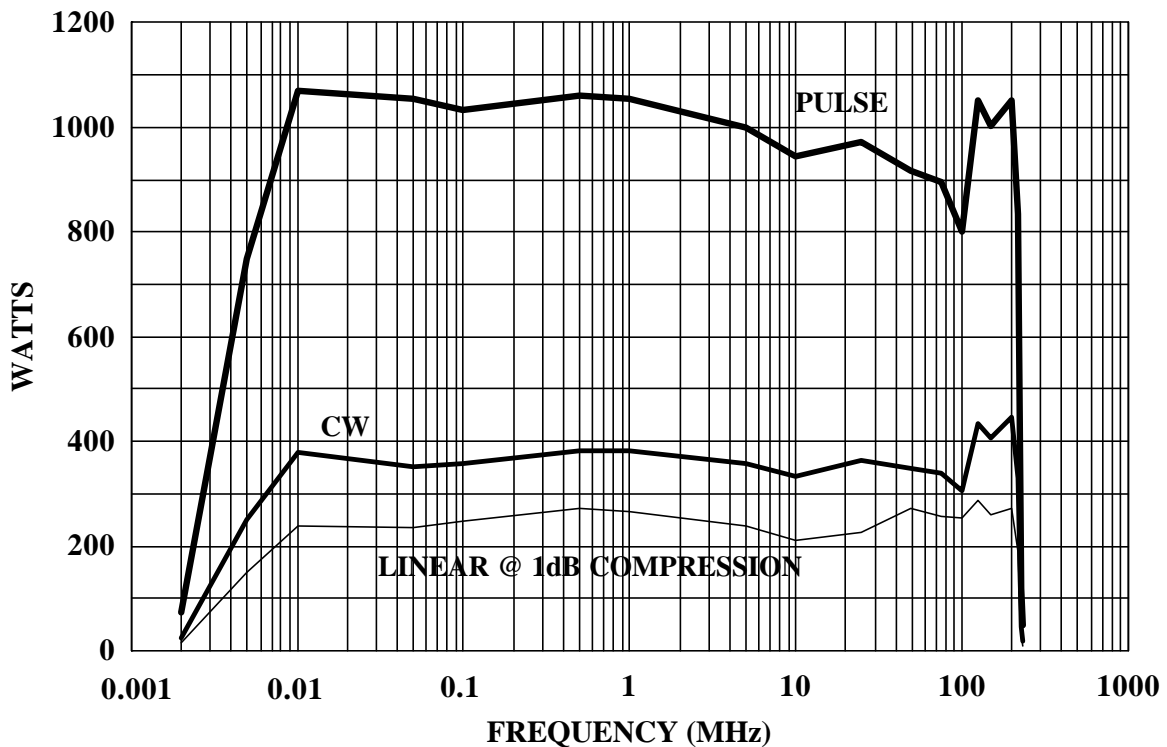


160 School House Road, Souderton, PA 18964-9990 USA
Phone 215-723-8181 • FAX 215-723-5688

MODEL 250L
250 WATTS CW
750 WATTS PULSE
10 kHz - 220 MHz

The Model 250L is a self contained, forced air cooled, broadband amplifier that features instantaneous bandwidth, high gain and moderate power output. It employs all solid state, MOSFET low power stages and a vacuum tube final amplifier. To increase its versatility for laboratory applications, both CW and PULSE modes are provided. All control and protection circuits use solid state logic. Overload comparators are used in both the CW and PULSE modes to safeguard against overdrive or excessive pulse lengths. In addition, the final amplifier tubes are protected by a high speed crowbar circuit. Easily accessible, rear mounted test points and LED indicators provide monitoring of operating voltages and currents. Remote control is provided through a rear panel mounted connector. Isolated TTL level remote control can be accomplished using our CP2001 interface. Isolated IEEE-488 compatible control can be provided with our Model CP3000. A continuously variable RF input attenuator conveniently located on the front panel permits operator adjustment of the output power as required. The Model 250L is useful in many applications such as RF susceptibility testing, plasma experiments, ultrasonics, and RF heating.

250L TYPICAL POWER OUTPUT



SPECIFICATIONS

Model 250L

POWER OUTPUT

Pulse Mode

Minimum.....	750 watts
Duty Cycle.....	10% maximum
Pulse Width.....	8 milliseconds maximum

CW Mode

Nominal.....	370 watts
Minimum.....	250 watts
Linear @ 1dB compression.....	150 watts minimum

FLATNESS..... ± 1.5 dB

FREQUENCY RESPONSE..... 10 kHz - 220 MHz instantaneously

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

GAIN (at maximum setting)..... 54dB minimum CW, 59dB minimum Pulse

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..... Noise floor data on request

HARMONIC DISTORTION (at 150 watts)..... Minus 20 dBc average
Below 115 MHz..... Minus 15 dBc maximum
Above 115 MHz..... Minus 25 dBc maximum

THIRD ORDER INTERCEPT POINT..... 61 dBm typical

GATING CHARACTERISTICS

Pulse Mode Gating / CW Mode Blanking

Signal (into 180 ohms).....	Plus or minus 2.5 to 6.0 VDC
Rise time	20 microseconds maximum
Fall time	5 microseconds maximum
RF Rise / Fall Time	10 nanoseconds maximum

PRIMARY POWER..... 100/110/120/200/208/220/240 $\pm 5\%$ VAC
(select via internal taps)..... 50/60 Hz, single phase
3700 watts maximum

CONNECTORS

RF Input.....	Type BNC female
RF Output.....	Type N female
Gating/Blanking.....	Type BNC female
Remote Control.....	25 pin female subminiature D

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

WEIGHT..... 84 kg (185 lb)

SIZE (WxHxD)..... 50.3 x 42.7 x 55.1 cm
19.8 x 16.8 x 21.7 in

* See Application Note #27