

PRD 7835

WIDEBAND AMPLIFIER

- * Very wide bandwidth 0.5 to 550 MHz
- * High output - 5 watts minimum
- * All solid-state reliability
- * Typical ± 0.7 dB gain flatness
- * 40 dB gain

The PRD 7835 Amplifier is a linear, wideband, solid-state amplifier capable of delivering five watts of RF power to many types of loads. Although the unit is designed for use in 50 ohm systems, it will deliver five watts of forward power into any passive load impedance. The unit has low noise and low distortion specifications. AM, FM, CW, PULSE, SSB, TV, and other modulated signals can be amplified to moderate power levels with minimum distortion. Due to its flat frequency response (typically ± 0.7 dB) it is well suited to boosting the output of sweep generators to provide higher output levels.

The PRD 7835 has applications in the laboratory and in systems for boosting the output of signal generators, and sweepers for testing and RF voltmeter calibration, as a broadband antenna preamplifier or oscilloscope preamplifier, a driver for transmitter chains, harmonic-generator chains, filter and component testing, ultrasonics, signal distribution, RFI testing, and many other general purpose laboratory and OEM system applications.

This compact, self-contained unit will have many uses in the design laboratory, calibration laboratory, and in systems and field use. Two or four units may be paralleled using combiners to provide additional linear RF power.

Frequency range:	0.5 to 550 MHz
Output power:	5 watts min. (1 dB gain compression)
Gain:	40 dB ± 1 dB over the frequency range
Harmonic output:	-25 dB typical at $P_o = 5$ watts
Third order intercept:	47 dBm min.
Noise figure:	7.5 dB typical broadband
Input impedance:	50 ohm nominal VSWR 2:1 max.
Output impedance:	50 ohm nominal VSWR 2:1 max.
Input level:	1 Vrms max.
Output protection:	Protected for any passive load
Reverse isolation:	70 dB min.
Connectors:	BNC female standard. TNC, N optional
Size (inches):	4.2 h x 8.4 w x 13.0 d incl. connectors
Power requirements:	105-125/210-250 VAC 47-63 Hz 125 watts max.
Operating temperature:	0° to 50°C ambient

