Model 150A100B,
M1 through M5
150 Watts CW
10kHz–100MHz

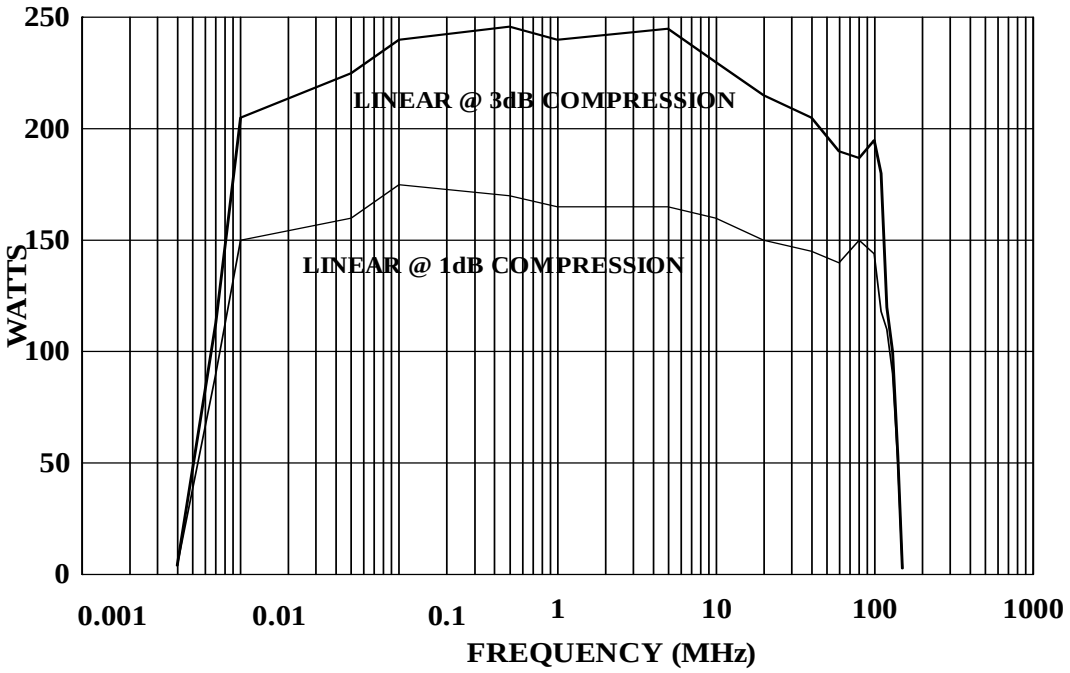
The Model 150A100B amplifier is a self-contained, broadband unit designed for laboratory applications where instantaneous bandwidth, high gain and moderate power output are required. Utilization of push-pull MOSFET circuitry lowers distortion, improves stability and allows operation into any load impedance without damage. The Model 150A100B, when used with an RF sweep generator, will provide a minimum of 150 watts of swept power.

There is a digital display on the front panel to indicate the operate status and fault conditions when an over temperature, power supply, or amplifier fault has occurred. The unit can be returned to operate when the condition has been cleared. The 150A100B includes digital control for both local and remote control of the amplifier. This 8-bit RISC microprocessor controlled board provides both IEEE-488 (GPIB) and asynchronous, full duplex RS-232 control of all amplifier functions.

Housed in a stylish, contemporary enclosure, the Model 150A100B 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 export classification for this equipment is EAR99. These commodities, technology or software are controlled for export in accordance with the U.S. Export Administration Regulations. Diversion contrary to U.S. law is prohibited.

150A100B TYPICAL POWER OUTPUT



SPECIFICATIONS, MODEL 150A100B

RATED POWER OUTPUT .....150 watts

INPUT FOR RATED OUPUT.....1.0 milliwatt maximum

POWER OUTPUT @ 3db COMPRESSION
- Nominal.....220 watts
- Minimum.....180 watts

POWER OUPUT @ 1db COMPRESSION
- Nominal.....155 watts
- Minimum.....125 watts

FLATNESS.....± 1.5 dB maximum

FREQUENCY RESPONSE.....10 kHz - 100 MHz instantaneously

GAIN .....52 dB minimum

GAIN ADJUSTMENT 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.
* See Application Note #27

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

NOISE FIGURE (above 1.0 MHz).....6 dB typical

HARMONIC DISTORTION.....Minus 20 dBc maximum at 125 watts

THIRD ORDER INTERCEPT POINT .....58 dBm typical

PRIMARY POWER .....90–135/180-270 VAC auto ranging 47-63Hz, single-phase.
1000 watts maximum

REMOTE INTERFACES IEEE-488, RS-232

CONNECTORS
- RF.....Type N female. See Model Configurations for location.
- REMOTE CONTROL
  - IEEE-488.....24 pin male
  - RS-232 .....9 pin Subminiature D (male)

REMOTE INTERLOCK.....15 Pin Subminiature D

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

MODEL CONFIGURATIONS

MODEL NUMBER	RF INPUT	RF OUTPUT	WEIGHT	SIZE (WxHxD)
150A100B	Front panel	Front panel	31.75 kg (70.0 lb	50.3 x 25.2 x 46.0 cm 19.8 x 9.9 x 18.1 in
150A100BM1	Rear panel	Rear panel	31.75 kg (70.0 lb	50.3 x 25.2 x 46.0 cm 19.8 x 9.9 x 18.1 in
150A100BM2	Same as 150A100B with enclosure removed for rack mounting		22.15 kg (49.0 lb)	48.3 x 22.25 x 43.2 cm 19.0 x 8.75 x 17 in
150A100BM3	Same as 150A100BM1 with enclosure removed for rack mounting		22.15 kg (49.0 lb)	48.3 x 22.25 x 43.2 cm 19.0 x 8.75 x 17 in
150A100BM4	Same as 150A100B and harmonic distortion is -25 dBc at 100 watts		31.75 kg (70.0 lb)	50.3 x 25.2 x 46.0 cm 19.8 x 9.9 x 18.1 in
150A100BM5	Same as 150A100B with >200W P3dB 1-3.5MHz		31.75 kg (70.0 lb	50.3 x 25.2 x 46.0 cm 19.8 x 9.9 x 18.1 in