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MODEL 100A400
M1, M2, M3
100 WATTS CW
100 kHz - 400 MHz

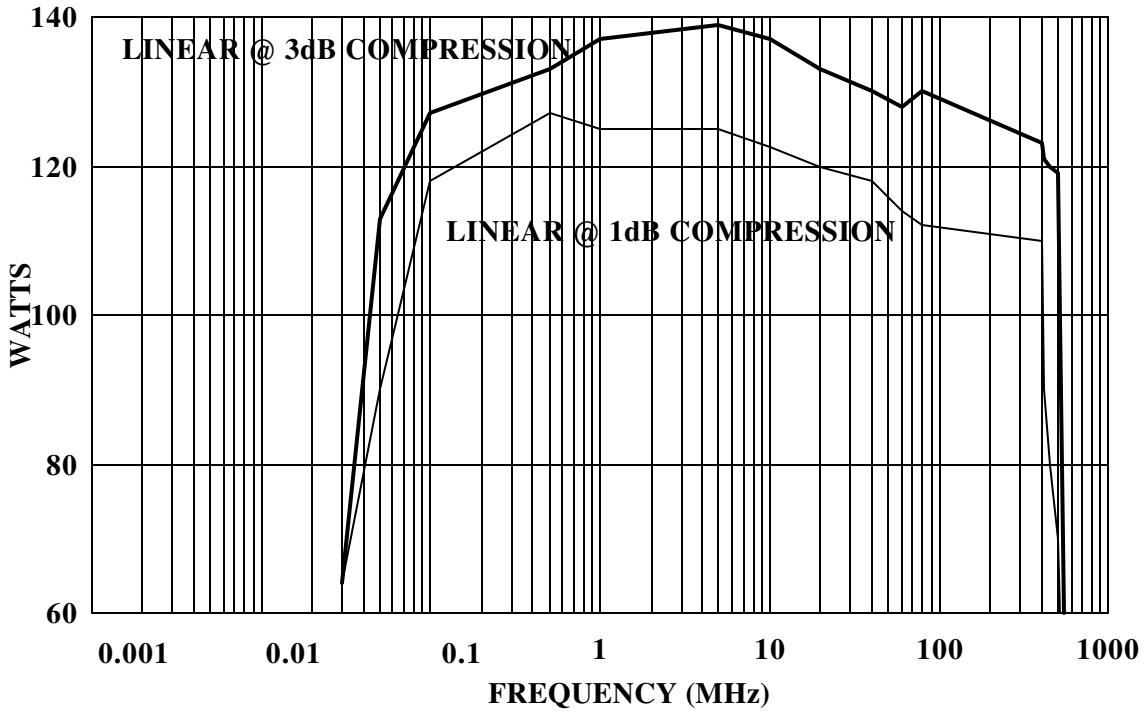
The Model 100A400 amplifier is a self-contained, broadband unit designed for laboratory applications where instantaneous bandwidth, high gain and moderate power output are required. Utilization of push-pull MOSFET circuitry lowers distortion, improves stability and allows operation into any load impedance without damage. The Model 100A400, when used with an RF sweep generator, will provide a minimum of 100 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 100A400 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.

All amplifier control functions and status indications are available remotely in GPIB / IEEE-488 format. The buss interface connector is located on the back panel and positive control of local or remote operation is assured by a keylock on the front panel of the amplifier.

Housed in a stylish, contemporary enclosure, the Model 100A400 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.

100A400 TYPICAL POWER OUTPUT



REV062802

SPECIFICATIONS
Model 100A400

RATED POWER OUTPUT.....*100 watts minimum*

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

POWER OUTPUT @ 3dB COMPRESSION
Nominal.....*130 watts*
Minimum.....*100 watts*

POWER OUTPUT @ 1dB COMPRESSION
Nominal.....*100 watts*
Minimum.....*75 watts*

FLATNESS.....*± 1.5 dB maximum*

FREQUENCY RESPONSE.....*100 kHz - 400 MHz instantaneously*

GAIN.....*50 dB minimum*

GAIN ADJUSTMENT RANGE.....*20 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*

HARMONIC DISTORTION.....*Minus 20 dBc maximum at the specified minimum 1dB compressed power*

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.....*See Model Configurations*
Remote Control
IEEE-488.....*24 pin female*
RS-232.....*9 pin subminiature D female*

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

REMOTE INTERLOCK.....*15 pin subminiature D*

** See Application Note #27*

Model Configurations

MODEL	*RF INPUT*	*RF OUTPUT*	*WEIGHT*	*SIZE (W x H x D)*
100A400	*Type N female on Front Panel*	*Type N female on Front panel*	*36 Kg (80 lb)*	*50.3 x 25.2 x 46.0 cm 19.8 x 9.9 x 18.1 in*
100A400M1	*Type N female on Rear Panel*	*Type N female on Rear panel*	*36 Kg (80 lb)*	*50.3 x 25.2 x 46.0 cm 19.8 x 9.9 x 18.1 in*
100A400M2	*Same as 100A400 with enclosure removed for rack mounting*		*25 Kg (60 lb)*	*48.3 x 22.25 x 43.2 cm 19 x 8.75 x 17 in*
100A400M3	*Same as 100A400M1 with enclosure removed for rack mounting*		*25 Kg (60 lb)*	*48.3 x 22.25 x 43.2 cm 19 x 8.75 x 17 in*