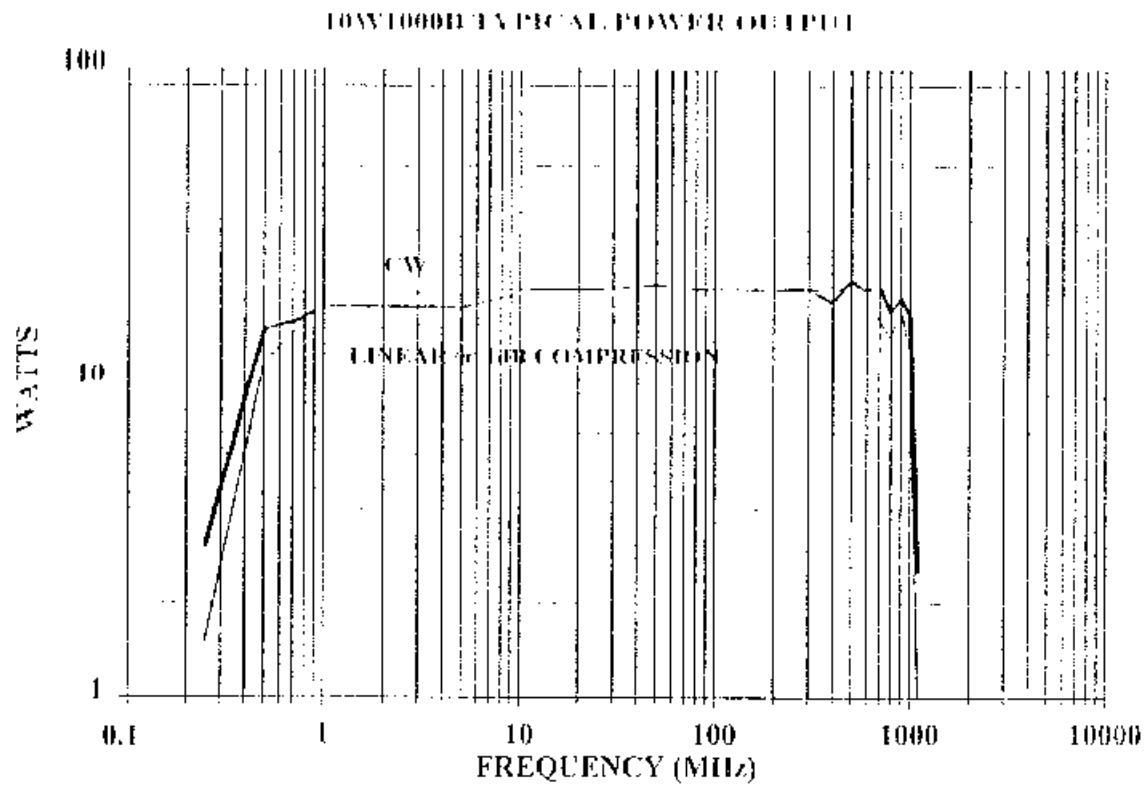


The Model 10W1000B is a solid state, self-contained, air-cooled, broadband amplifier designed for applications where instantaneous bandwidth and high gain are required. Push-pull circuitry is utilized in the high power stages to lower distortion and improve stability. The 10W1000B, when used with an RF sweep generator, will provide a minimum of 10 watts of swept power. Included is a front panel gain control which permits the operator to conveniently set the desired output level. The 10W1000B is protected from RF input overdrive by limiting diodes and an RF input leveling circuit which controls the RF input level to the RF amplifier first stage when the RF input level is increased above 0 dBm. The RF Amplifier stages are protected from over temperature by removing the DC voltage to them if an over temperature condition occurs due to cooling blockage or fan failure. There is a fault lamp on the rear panel to indicate an over temperature condition or power supply fault has occurred. The unit can be returned to operate when the fault condition has been cleared.

The 10W1000B utilizes a switching power supply with universal and autotuning input which will automatically accept from 90 to 135 VAC or from 180 to 270 VAC at 47 to 63 Hz.



SPECIFICATIONS

Model 10W1000B

POWER OUTPUT, CW

Nominal 18 watts
Minimum 10 watts
Linear w/ 1dB compression 10 watts minimum

FLATNESS ± 1.0 dB typical
 ± 1.5 dB maximum

FREQUENCY RESPONSE 500 kHz-1000 MHz instantaneously

INPUT FOR RATED OUTPUT 1.0 milliwatt maximum

GAIN (at maximum setting) 40 dB minimum

GAIN ADJUSTMENT (Continuous Range) 10 dB minimum

INPUT IMPEDANCE 50 ohms, VSWR 2.0:1 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 CAPABILITY Will faithfully reproduce AM, FM, or pulse modulation appearing on the input signal

HARMONIC DISTORTION Minus 20 dBc maximum at 10 watts

THIRD ORDER INTERCEPT POINT 50 dBm typical

PRIMARY POWER (selected automatically) 90-135/180-270 VAC
50/60 Hz, single phase
300 watts maximum

CONNECTORS Type N female on front panel

COOLING Forced air (self contained fans)

WEIGHT 16.0 kg (35 lb)

SIZE (WxHxD) 50.3 x 15.5 x 39.0 cm
19.8 x 6.1 x 11.8 in

* See Application Note #27