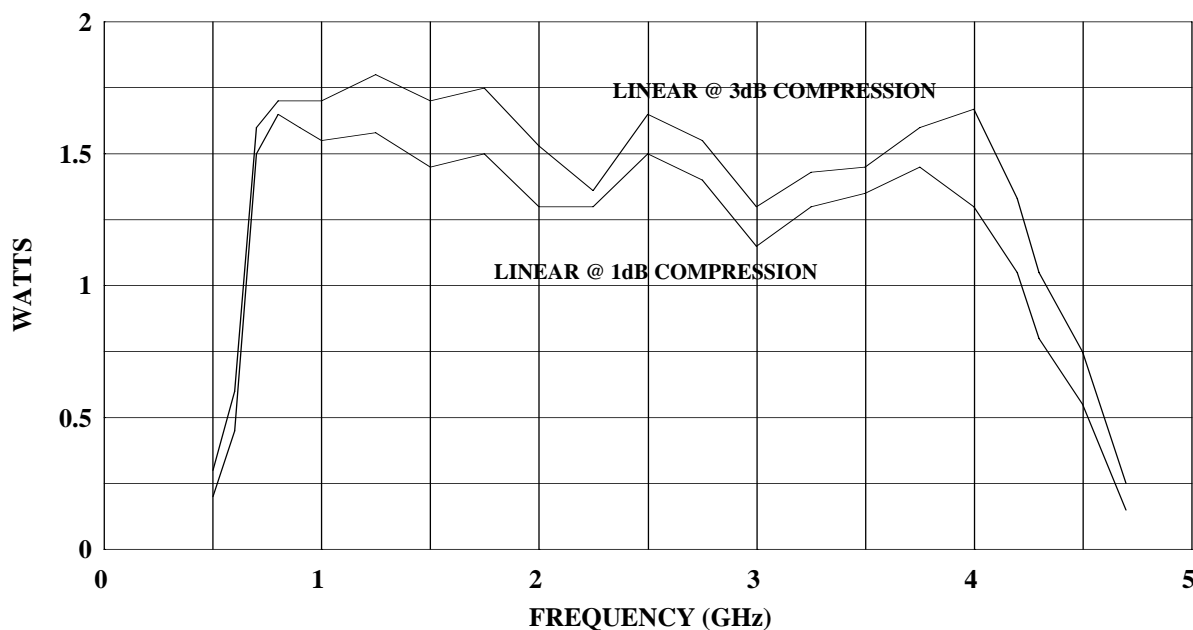


MODEL 1S1G4A
M1, M2, M3
1 WATT CW
0.8 -4.2 GHz

The Model 1S1G4A is a solid state, self-contained, air-cooled, broadband amplifier designed for applications where instantaneous bandwidth and high gain are required. Housed in a stylish contemporary cabinet, the unit is designed for benchtop use, but can be removed from the cabinet for immediate equipment rack mounting. The 1S1G4A, when used with a sweep generator, will provide a minimum of 1 watt of RF power. Included is a front panel gain control which permits the operator to conveniently set the desired output level. The 1S1G4A is protected from RF input overdrive by 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.

1S1G4A TYPICAL POWER OUTPUT



SPECIFICATIONS

Model 1S1G4A

RATED POWER OUTPUT	1 watt minimum
INPUT FOR RATED OUTPUT	1.0 milliwatt maximum
POWER OUTPUT @ 3dB COMPRESSION	
<i>Nominal</i>	1.3 watts
<i>Minimum</i>	1 watt
POWER OUTPUT @ 1dB COMPRESSION	
<i>Nominal</i>	1 watt
<i>Minimum</i>	0.7 watts
FLATNESS	±1.0 dB typical ±1.5 dB maximum
FREQUENCY RESPONSE	0.8 -4.2 GHz instantaneously
GAIN (at maximum setting)	30 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 0.8 watts
THIRD ORDER INTERCEPT POINT	41 dBm typical
PRIMARY POWER (Selected Automatically)	90-132, 180-264 VAC 50/60 Hz, single phase 50 watts maximum
CONNECTORS	Type N female (see Model Configuration)
COOLING	Forced air (self contained fans)
* See Application Note #27	

Model Configurations

<i>Model Number</i>	<i>RF Connectors</i>	<i>Instrument Case</i>	<i>Weight</i>	<i>Size</i>
1S1G4A	Front	Yes	6.4 Kg (14.0 lb)	26 x 10.9 x 28.2 cm 10.3 x 4.3 x 11.1 in
1S1G4AM1	Rear	Yes	6.4 Kg (14.0 lb)	26 x 10.9 x 28.2 cm 10.3 x 4.3 x 11.1 in
1S1G4AM2	Front	No	2.9 Kg (6.5 lb)	24.1 x 9.4 x 27.9 cm 9.5 x 3.7 x 11 in
1S1G4AM3	Rear	No	2.9 Kg (6.5 lb)	24.1 x 9.4 x 27.9 cm 9.5 x 3.7 x 11 in