HP 8349B Amplifier specifications

Specifications describe the instrument's warranted performance over the temperature range 20 to 30°C. **Supplemental characteristics,** denoted typical or nominal, are intended to provide information useful in applying the instrument, but are non-warranted paramenters.

Frequency range: 2 to 20 GHz

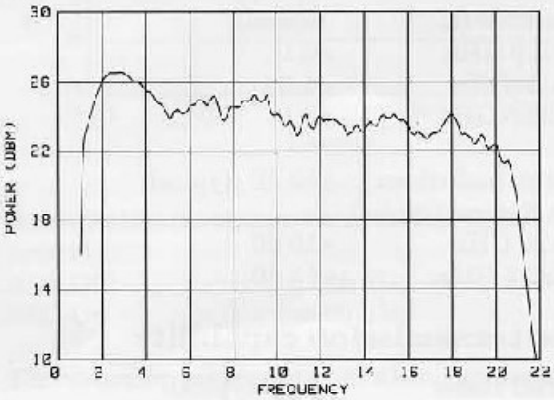
Maximum output power:

	Unleveled (at +5 dBm input)
2.0 to 18.6 GHz:	+20 dBm
18.6 to 20 GHz:	+18 dBm
Internally leveled	
2.0 to 18.6 GHz:	+19 dBm
18.6 to 20 GHz:	+17 dBm

Power flatness: ±3 dB (at 0 dBm input)

1 dB compression point: +21 dBm, nominal

Typical maximum unleveled output power



Power flatness: (ALC On) ±1.25 dB

LED display accuracy

Calibrated range: +0 dBm to +20 dBm

Calibrated accuracy: ±1.5 dB

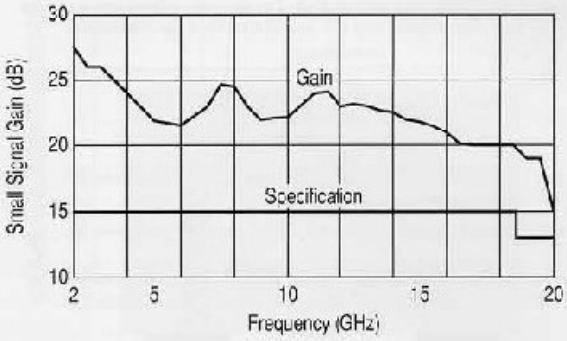
Minimum small signal gain:

(at –5 dBm input)

2.0 to 18.6 GHz: ≥15 dB

18.6 to 20.0 GHz: ≥13 dB

Typical small signal gain (at –5 dBm input)

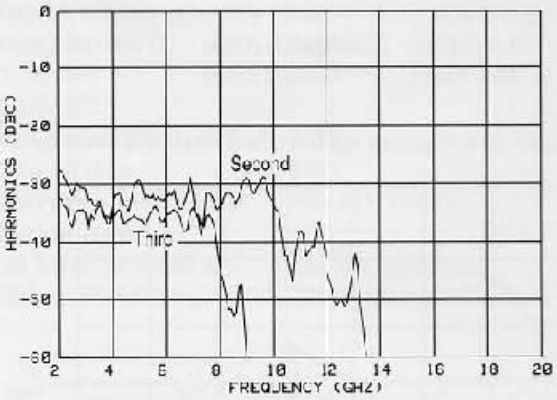


Harmonics: (at maximum specified output power)

2.0 to 11.0 GHz: <–20 dBc

11.0 to 20.0 GHz: <–30 dBc

Typical second and third order harmonics



Non-harmonic spurious

(dB below the fundamental at maximum specified output power): <-55 dBc

Third order intercept:

+33 dBm, nominal

Maximum continuous input:

Microwave power: +27 dBm

DC voltage: ±10 V

Input and output impedance:

50Ω, nominal

Input SWR: ≤2.8:1 (typical)

Output SWR: (typical)

ALC on: ≤2.5:1

ALC off:

2.0 to 5.0 GHz: ≤4.8:1

5.0 to 11.0 GHz: ≤3.8:1

11.0 to 20.0 GHz: ≤3.2:1

Reverse isolation: >50 dB (typical)

Noise figure: <13 dB (typical)