

Table 1-1. Specifications and Supplemental Characteristics for the HP 8349A

Shaded values refer to specifications. Specifications are the warranted performance standards for the instrument. Supplemental characteristics (typical or nominal values) are unshaded, and are included as additional information only. They are not the warranted performance standards (specifications) of the instrument.

Unless otherwise noted, all specifications apply over the temperature range 0°C to 55°C.

FREQUENCY RANGE: 2.0 to 20.0 GHz**INPUT AND OUTPUT (25°C ±5°C)**

Impedance (Input and Output): 50 ohms, nominal

Minimum Output Power (25°C ±5°C):

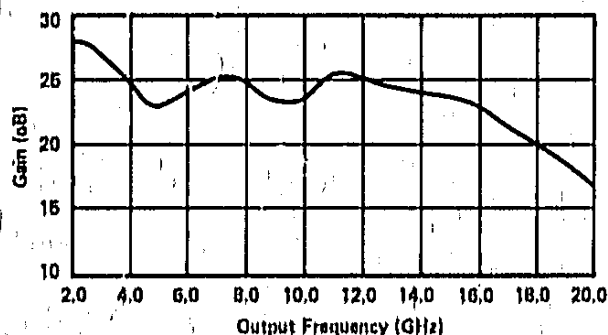
Frequency Range (GHz)	Input	Output	
		Leveled	Unleveled
2.0 to 18.6	5 dBm (3.2mW)	19 dBm (80mW)	20 dBm (100mW)
18.6 to 20.0	6 dBm (4.0mW)	19 dBm (80mW)	20 dBm (100mW)

Output Power Temperature Stability: 0.1 dB/°C

Power Flatness (Leveled): ±1.25 dB

1 dB Compression Point: +21 dBm, nominal

Minimum Small Signal Gain (at -5 dBm input): 15 dB



Typical Small Signal Gain (at -5 dBm input)

Gain Temperature Stability: 0.1 dB/°C

Noise Figure: <13 dB, typical

SWR

Frequency Range (GHz)	Input	Output	
		Leveled	Unleveled (typical)
2.0 to 5.0	≤2.8	≤2.5	≤4.8
5.0 to 11.0	≤2.8	≤2.5	≤3.8
11.0 to 18.0	≤2.8	≤2.5	≤3.2
18.0 to 20.0*	≤2.8	≤2.5	≤3.2

*SWR from 18.0 to 20.0 GHz is typical

INPUT AND OUTPUT (Cont'd)

Maximum Continuous Input, to the input or output ports:
+27 dBm (RF), ±10V

DETECTOR OUTPUT Voltage (Rear Panel, Used to Level):
>-1.0mV/mW, typical

SPECTRAL PURITY

Harmonics (dBc, at 20 dBm output power)	Fundamental Frequency (GHz)
≤-30 ≤-30 (typical)	2.0 to 11.0 11.0 to 20.0

Non-Harmonic Spurious: ≤-55 dBc

Third Order Intercept: +33 dBm, nominal

PULSE TRANSMISSION CAPABILITY

Rise/Fall Time: <10 ns, typical

Delay Time (input to output): <8 ns, typical

GENERAL

Power Display (25°C ±5°C, CW Frequencies, and Full Band Sweep Times >4 sec)

Range: 0 dBm to +20 dBm

Accuracy: ±1.3 dB, typical

Reverse Isolation: >50 dB, typical

RF Input/Output Connectors: Type N Female

Power Requirements: 50 to 400 Hz, 100, 120, 220, 240 Volts (±10%); 30 VA maximum

Weight: Net 7 kg (15 lb), Shipping 14 kg (31 lb)

Dimensions:

