Table 2. Specifications

HP 8481A

Power Range: $-30 \text{ dBm to } +20 \text{ dBm } (1 \mu\text{W} - 100 \text{ mW})$

Frequency Range: 10 MHz — 18 GHz

Nominal Impedance: 50Ω

Maximum SWR (Reflection Coefficient):

10 MHz to 30 MHz <1.4 (0.166) 30 MHz to 50 MHz <1.18 (0.083) 50 MHz to 2 GHz <1.10 (0.048) 2 GHz to 12.4 GHz <1.18 to 0.083) 12.4 GHz to 18 GHz <1.28 (0.123)

Maximum Power: 300 mW Average Maximum Peak Power: 15W Peak Maximum Energy/Pulse: 30W · μs RF Connector: Type N Male

HP 8482A

Power Range: $-30 \text{ dBm to } +20 \text{ dBm } (1 \mu\text{W} - 100 \text{ mW})$

Frequency Range: 100 kHz — 4.2 GHz

Nominal Impedance: 50Ω

Maximum SWR (Reflection Coefficient):

100 kHz to 300 kHz <1.60 (0.231) 300 kHz to 1 MHz <1.20 (0.091) 1 MHz to 2 GHz <1.10 (0.048) 2 GHz to 4.2 GHz <1.30 to 0.130)

Maximum Power: 300 mW Average Maximum Peak Power: 15W Peak Maximum Energy/Pulse: 30W · μs RF Connector: Type N Male

HP 8483A

Power Range: $-30 \text{ dBm to } +20 \text{ dBm } (1 \mu\text{W} - 100 \text{ mW})$

Frequency Range: 100 kHz — 2 GHz

Nominal Impedance: 75Ω

Maximum SWR (Reflection Coefficient):

100 kHz to 600 kHz <1.80 (0.286) 600 kHz to 2 GHz <1.18 (0.083)

Maximum Power: 300 mW Average Maximum Peak Power: 10W Peak Maximum Energy/Pulse: $30W \cdot \mu s$ RF Connector: Type N Male (75Ω)

Dimensions, Including RF Connector: 30 mm wide, 38 mm high, 105 mm long (1 in. x $1\frac{1}{2}$ in. x 5 in.)

Weight: Net, 0.2 kg (8 oz)

Note



When operating in the top 10 dB input power range (e.g. +10 to +20 dBm), an error due to deviation from square law operation may occur. This possible error, which applies to the 8481A, 8482A, and 8483A, is expressed as follows:

Worst Case Power Linearity:

+2/-4% (+10 to +20 dBm input range)

Negligible (-30 to +10 dBm input range)