

Operation and Service Manual
General Information

Table 2 HP 8447F Specifications

Specifications	HP 8447F		HP 8447F H64	
	Preamp	Power Amp	Preamp	Low Freq. Preamp
Frequency range	0.1 to 1300 MHz	0.1 to 1300 MHz	0.1 to 1300 MHz	9 kHz to 50 MHz
Typical 3 dB bandwidth (Std, Opt 001 and Opt 011)	.075 to 1700 MHz	.075 to 1400 MHz	.075 to 1700 MHz	6 kHz to 400 MHz
Mean Gain (20° to 30°C)	25 dB minimum	22 dB ± 2.0dB	25 dB minimum	26 dB minimum
Gain flatness across frequency range	± 1.5 dB	± 1.5 dB	± 1.5 dB	± 2 dB
Noise Figure	<8.5 dB	<11 dB (typical)	<8.5 dB	—
Output power for 1 dB gain compression	>+7 dBm (typical)	≥+12.5 dBm (0.1 to 1000 MHz)	>+7 dBm (typical)	>+15 dBm (0.1 to 1000 MHz)
Harmonic distortion	-30 dB for 0 dBm output (typical)	-30 dB for +8 dBm output	-30 dB for 0 dBm output (typical)	-35 dBc for +10 dBm output
Typical output for <-60 dB harmonic distortion	-30 dBm	-20 dBm	-30 dBm	-2 dBm
VSWR, 9 kHz to 50 MHz	—	—	—	<2.0:1
VSWR, 1 to 1300 MHz	<2.0:1 Input <2.2:1 Output	—	<2.0:1 Input <2.2:1 Output	
VSWR, 1 to 1400 MHz	—	<2.2:1 Input <2.5:1 Output	—	
Impedance	50 Ω	50 Ω	50 Ω	50 Ω
Reverse isolation	>40 dB	>40 dB	>40 dB	—
Maximum DC input voltage	±10 V	±10 V	±10 V	±10 V
Typical risetime	400 ps	420 ps	400 ps	—
Typical group delay	1.1 ns ^a	1.5 ns ^b	1.1 ns ^a	—
Net weight	3 lbs 14 oz (1.75 kg)		3 lbs 14 oz (1.75 kg)	
Option 001	—		—	