



83597B RF Plug-in for the Agilent 8350B, 10 MHz to 40 GHz (Discontinued - Support Information Only)

Data Sheet

Frequency Characteristics

Range Band 0: 0.01 to 2.4 GHz

Band 1: 2.4 to 7 GHz

Band 2: 7 to 14 GHz

Band 3: 14 to 26.5 GHz

Band 4: 26.5 to 40 GHz

Full Band: 0.01 to 40 GHz

Accuracy CW Mode Band 0: ± 5 MHz

Band 1: ± 5 MHz

Band 2: ± 10 MHz

Band 3: ± 20 MHz

Band 4: ± 25 MHz

All Sweep Modes Band 0: ± 15 MHz

Band 1: ± 20 MHz

Band 2: ± 25 MHz

Band 3: ± 50 MHz

Band 4: ± 65 MHz

Full Band: ± 75 MHz

Frequency Markers Band 0: ± 15 MHz, $\pm 0.4\%$ of sweep width

Band 1: ± 20 MHz, $\pm 0.4\%$ of sweep width

Band 2: ± 25 MHz, $\pm 0.4\%$ of sweep width

Band 3: ± 50 MHz, $\pm 0.4\%$ of sweep width

Band 4: ± 65 MHz, $\pm 0.4\%$ of sweep width

Full Band: ± 75 MHz, $\pm 0.4\%$ of sweep width

Stability With Temperature Band 0: ± 200 kHz/ $^{\circ}$ C, typical

Band 1: ± 200 kHz/ $^{\circ}$ C, typical

Band 2: ± 400 kHz/ $^{\circ}$ C, typical

Band 3: ± 800 kHz/ $^{\circ}$ C, typical

Band 4: ± 1.6 MHz/ $^{\circ}$ C, typical

With 10 dB Power Change: Band 0 to 2: ± 150 kHz

Band 3: ± 200 kHz

Band 4: ± 250 kHz

With 3:1 Load SWR: Band 0 to 3: ± 100 kHz

Band 4: ± 200 kHz

Output Characteristics

Maximum Leveled Power: Normal: Band 0: 10 dBm

Band 1: 10 dBm (15 dBm high-power mode)

Band 2: 10 dBm (15 dBm high-power mode)



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Band 3: 10 dBm (15 dBm high-power mode) 5 dBm >20 GHz
Band 4: 3 dBm; 0 dBm >40 GHz
Option 002 (60 dB step atten): Band 0: 10 dBm
Band 1: 8.5 dBm (13 dBm high-power mode)
Band 2: 8.5 dBm (13 dBm high-power mode)
Band 3: 8.5 dBm (13 dBm high-power mode)
Band 4: 8.5 dBm (13 dBm high-power mode) -3 dBm >40 GHz
Power Level Accuracy: Band 0: ± 1.5 dB
Band 1: ± 1.3 dB
Band 2: ± 1.3 dB
Band 3: ± 1.4 dB
Band 4: ± 2.2 dB
Full Band: ± 2.2 dB
Spurious Signals: Harmonics and Subharmonics: Band 0: < -25 dBc (< -50 dBc > 1.5 GHz)
Band 1: < -45 dBc
Band 2: < -45 dBc
Band 3: < -40 dBc
Band 4: < -40 dBc (< -35 dBc > 40 GHz)
Output Power Resolution Displayed: 0.1 dB Programmable/Settable: 0.01 dB
Minimum Settable Power: -12 dBm (-72 dBm with Option 002)
Power Sweep: > 12 dB (22 dB < 20 GHz)

Modulation Characteristics:

External AM Frequency Response: 100 kHz, typical Range of Amplitude Control: 15 dB, typical Sensitivity: 1 dB/V, typical

External FM Maximum Deviations for Modulation Frequencies DC to 100 Hz: ± 75 MHz (cross-over coupled) ± 12 MHz (direct coupled) 100 Hz to 1 MHz: ± 7 MHz 1 MHz to 2 MHz: ± 5 MHz 2 to 10 MHz: ± 1 MHz

Sensitivity (switch selectable) FM Mode: -20 MHz/V, typical Phase Lock Mode: -6 MHz/V, typical

General Specifications:

Minimum Sweep Time: 30 ms (single band) 75 ms (< 20 GHz sweep width) 150 ms (> 20 GHz sweep width)

Auxiliary Output Rear Panel: 2.3 to 7.0 GHz Fundamental Oscillator Output: 0 dBm, nominally

Frequency Reference Output: 0.5 V/Hz (0.01 to 38 GHz) 0.25 V/GHz (0.01 to 50 GHz) ± 25 mV (< 2.4 GHz) ± 100 mV (> 2.4 GHz)

RF Output Connector: 2.4 mm male

Net Weight: 6.8 kg (16 lb)

Shipping Weight: 11.8 kg (26 lb)