



83590A RF Plug-in for the Agilent 8350B, 2 GHz to 20 GHz (Discontinued - Support Information Only)

Data Sheet

Frequency Characteristics:

Range Band 1: 2 to 7 GHz Band 2: 7 to 13.5 GHz Band 3: 13.5 to 20 GHz Full Band: 2 to 20 GHz

Accuracy CW Mode Band 1: ± 5 MHz Band 2: ± 10 MHz Band 3: ± 10 MHz All Sweep Modes Band 1: ± 20 MHz Band 2: ± 25 MHz Band 3: ± 30 MHz Full Band: ± 50 MHz Frequency Markers Band 1: ± 20 MHz, $\pm 0.5\%$ of sweep width Band 2: ± 25 MHz, $\pm 0.5\%$ of sweep width Band 3: ± 30 MHz, $\pm 0.5\%$ of sweep width Full Band: ± 50 MHz, $\pm 0.5\%$ of sweep width

Stability With Temperature Band 1: ± 200 kHz/ $^{\circ}$ C, typical Band 2: ± 400 kHz/ $^{\circ}$ C, typical Band 3: ± 600 kHz/ $^{\circ}$ C, typical With 10 dB Power Change: Band 1: ± 200 kHz Band 2: ± 200 kHz Band 3: ± 400 kHz Full Band: ± 600 kHz With 3:1 Load SWR: Band 1: ± 100 kHz Band 2: ± 200 kHz Band 3: ± 300 kHz Full Band: ± 300 kHz

Output Characteristics:

Maximum Leveled Power: Normal: Band 1: 10 mW Band 2: 10 mW Band 3: 10 mW Full Band: 1 mW Option 002: Band 1: 7.0 mW Band 2: 6.3 mW Band 3: 5.0 mW Full Band: 5.0 mW Power Level Accuracy: Band 1: ± 1.3 dB Band 2: ± 1.3 dB Band 3: ± 1.4 dB Full Band: ± 1.5 dB

Spurious Signals Harmonics and Subharmonics: < -25 dBc

Output Power Resolution Displayed: 0.1 dB Programmable/Settable: 0.01 dB

Minimum Settable Power: -5 dBm (-75 dBm with Option 002)

Power Sweep Calibrated Range: > 15 dB (> 12 dB with Option 002) Accuracy (including linearity): ± 1.5 dB Resolution: 0.1 dB, displayed

Modulation Characteristics:

External AM Frequency Response: 100 kHz, typical Maximum Input: 15 V Range of Amplitude Control: 15 dB, typical Sensitivity: 1 dB/V typical Input Impedance: @ 10 kohms

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 Input Impedance: @ 2 kohms

General Specifications:

Minimum Sweep Time: 10 ms, single band 25 ms, full band

Auxiliary Output Rear Panel: 2 to 7 GHz Fundamental Oscillator Output: 0 dBm, nominally

Frequency Reference Output: 1 V/GHz (0.01 to 18 GHz) 0.5 V/GHz (0.01 to 20 GHz)

RF Output Connector: Type-N, female

Net Weight: 5.7 kg (13.2 lb)

Shipping Weight: 9.2 kg (20 lb)

Furnished: Operating/service manual



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