

83595A RF Plug-in for the Agilent 8350B Sweep Oscillator (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 13.5 GHz

Band 3: 13.5 to 20 GHz Band 4: 20 to 26.5 GHz

Full Band: 0.01 to 26.5 GHz

Accuracy CW Mode Band 0: ±5 MHz

Band 1: ± 5 MHz

Band 2: ±10 MHz

Band 3: ± 10 MHz

Band 4: ± 12 MHz

All Sweep Modes Band 0: ±15 MHz

Band 1: ±20 MHz

Band 2: ±25 MHz

Band 3: ± 30 MHz

Band 4: ±35 MHz

Full Band: ±50 MHz

Frequency Markers Band 0: ±15 MHz, ±0.5% of sweep width

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

Band 4: ± 35 MHz, $\pm 0.5\%$ of sweep width

Full Band: ±50 MHz, ±0.5% of sweep width **Stability** With Temperature Band 0: ±200 kHz/°C, typical

Band 1: ±200 kHz/°C, typical

Band 2: ±400 kHz/°C, typical

Band 3: ±600 kHz/°C, typical

Band 4: ±800 MHz/°C, typical

Full Band: ±800 MHz/°C, typical

With 10 dB Power Change: Band 0: ±200 kHz

Band 1: $\pm 200 \text{ kHz}$

Band 2: ±400 kHz

Band 3: $\pm 600 \text{ kHz}$

Band 4: ±800 MHz

Full Band: ±800 MHz

With 3:1 Load SWR: Band 0: ±100 kHz

Band 1: $\pm 100 \text{ kHz}$ Band 2: $\pm 200 \text{ kHz}$



Band 3: ±300 kHz Band 4: ±400 MHz Full Band: ±400 MHz

Output Characteristics:

Maximum Leveled Power: Normal: Band 0: 10 mW

Band 1: 10 mW Band 2: 10 mW Band 3: 10 mW Band 4: 2.5 mW Full Band: 2.5 mW

Option 002: Band 0: 10 mW

Band 1: 7 mW Band 2: 6.3 mW Band 3: 5 mW Band 4: 1.25 mW Full Band: 1.25 mW

Power Level Accuracy: Band $0: \pm 1.5 \text{ dB}$

Band 1: ±1.3 dB Band 2: ±1.3 dB Band 3: ±1.4 dB Band 4: ±1.7 dB Full Band: ±1.8 dB

Spurious Signals: Harmonics and Subharmonics: Band 0: <-25 dBc

Band 1: <-25 dBc Band 2: <-25 dBc Band 3: <-25 dBc Band 4: <-20 dBc Full Band: <-20 dBc

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

Minimum Settable Power: -5 dBm (-60 dBm with Option 002)

Power Sweep: Calibrated Range: >9 dB (>6 dB with Option 002) Accuracy (including linearity): >1.5 dB, typical

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 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 Input Impedance: @ 2 kohms External Pulse Modulation: Pulse Input: TTL compatible 0.01 to 20.0 GHz: Square wave modulation up to 30 kHz 0.01 to 2.5 GHz Rise/Fall Time: 15 nsec, typical Minimum RF Pulse Width, typical Internally Leveled: 1 μ usec Unleveled (power set to +20 dBm): 200 nsec 2.5 to 26.5 GHz Rise/Fall Time: 10 nsec, typical Minimum RF Pulse Width, typical Internally Leveled: 1 μ usec Unleveled (power set to +20 dBm): 100 nsec On/Off Ratio: >80 dB, typical

General Specifications:

Minimum Sweep Time: 10 ms (single band) 30 ms (full band)

Auxiliary Output Rear Panel: 2.3 to 7 GHz Fundamental Oscillator Output: 0 dBm, nominally **Frequency Reference Output:** 1 V/GHz ±25 mV, <=18 GHz 0.5 V/GHz ±25 mV, <=26.5 GHz

RF Output Connector: Type APC 3.5, male

Net Weight: 6 kg (13.2 lb) Shipping Weight: 9.2 kg (20 lb)

Furnished: Operating/service manual SMA (f) to type-N (f) adapter

