

## 83592A RF Plug-in for the Agilent 8350B, 10 MHz to 20 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 13.5 GHz Band 3: 13.5 to 20 GHz Full Band: 0.01 to 20 GHz

Accuracy (25°  $\pm$ 5°C) CW Mode Band 0:  $\pm$ 5 MHz

Band 1: ±5 MHz Band 2: ±10 MHz Band 3: ±10 MHz

All Sweep Modes Band 0: ±15 MHz

Band 1: ±20 MHz Band 2: ±25 MHz Band 3: ±30 MHz Full Band: ±50 MHz

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

Band 1: ±20 MHz, ±0.5% of sweep width Band 2: ±25 MHz, ±0.5% of sweep width Band 3: ±30 MHz, ±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 Full Band: ±600 kHz/°C, typical

With 10 dB Power Change: Band 0: ±200 kHz/°C

Band 1: ±200 kHz/°C Band 2: ±400 kHz/°C Band 3: ±600 kHz/°C Full Band: ±600 kHz/°C

With 3:1 Load SWR: Band 0: ±100 kHz/°C

Band 1: ±100 kHz/°C Band 2: ±200 kHz/°C Band 3: ±300 kHz/°C Full Band: ±300 kHz/°C



## Output Characteristics:

Maximum Leveled Power:(25°C) Normal: Band 0: 10 mW

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

Option 002: Band 0: 10 mW

Band 1: 7.0 mW Band 2: 6.3 mW Band 3: 5.0 mW Full Band: 5.0 mW

Power Level Accuracy: Band 0: ±1.5 dB

Band 1:  $\pm 1.3$  dB Band 2:  $\pm 1.3$  dB Band 3:  $\pm 1.4$  dB Full Band:  $\pm 1.5$  dB

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

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

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

Minimum Settable Power: -2 dBm Option 002: (-72 dBm with) Power Sweep Calibrated Range: >12 dB Option 002: >9 dB

## 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, typical Input Impedance: @ 2 kohms

**External Pulse Modulation** Pulse Input: TTL 0.01 to 20 GHz: Square wave modulation up to 30 kHz 0.01 to 2.5 GHz Rise/Fall Time: 15 nsec, typical Minimum RF Pulse Width Internally Leveled: 1 μsec, typical Unleveled (power set to +20 dBm): 200 nsec 2.5 to 20 GHz Rise/Fall Time: 10 nsec, typical Minimum RF Pulse Width Internally Leveled: 1 μsec, typical Unleveled (power set to +20 dBm): 100 nsec On/Off Ratio: >30 dB, typical

## General Specifications:

Minimum Sweep Time: 10 ms (single band) 25 ms (full band)

**Auxiliary Output** Rear Panel: 2.3 to 7 GHz Fundamental Oscillator Output: 0 dBm, nominally **Frequency Reference Output:** 1 V/Hz (0.01 to 18 GHz) 0.5 V/GHz (0.01 to 20 GHz) ±25 mV

**RF Output Connector:** Type-N, female

Net Weight: 6.0 kg (13.2 lb) Shipping Weight: 9.2 kg (20 lb) Furnished: Operating/service manual

