



# 83592C RF Plug-in for the Agilent 8350B, 10 MHz to 20 GHz, Low Harmonics (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** CW Mode Band 0:  $\pm 15$  MHz

Band 1:  $\pm 5$  MHz

Band 2:  $\pm 10$  MHz

Band 3:  $\pm 10$  MHz

All Sweep Modes Band 0:  $\pm 15$  MHz

Band 1:  $\pm 20$  MHz

Band 2:  $\pm 25$  MHz

Band 3:  $\pm 30$  MHz

Full Band:  $\pm 50$  MHz

Frequency Markers Band 0:  $\pm 15$  MHz,  $\pm 0.5\%$  of sweep width

Band 1:  $\pm 20$  MHz,  $\pm 0.5\%$  of sweep width

Band 2:  $\pm 25$  MHz,  $\pm 0.5\%$  of sweep width

Band 3:  $\pm 30$  MHz,  $\pm 0.5\%$  of sweep width

Full Band:  $\pm 50$  MHz,  $\pm 0.5\%$  of sweep width

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

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

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

Band 3:  $\pm 600$  kHz/ $^{\circ}$ C, typical

Full Band:  $\pm 600$  MHz/ $^{\circ}$ C, typical

With 10 dB Power Change: Band 0:  $\pm 200$  kHz/ $^{\circ}$ C

Band 1:  $\pm 200$  kHz/ $^{\circ}$ C

Band 2:  $\pm 400$  kHz/ $^{\circ}$ C

Band 3:  $\pm 600$  kHz/ $^{\circ}$ C

Full Band:  $\pm 600$  MHz/ $^{\circ}$ C

With 3:1 Load SWR: Band 0:  $\pm 100$  kHz

Band 1:  $\pm 100$  kHz

Band 2:  $\pm 200$  kHz

Band 3:  $\pm 300$  kHz

Full Band:  $\pm 300$  MHz



Output Characteristics:

**Maximum Leveled Power:** Normal: Band 0: 10 mW

Band 1: 4 mW

Band 2: 4 mW

Band 3: 4 mW

Full Band: 10 mW

Option 002: Band 0: 10 mW

Band 1: 3.2 mW

Band 2: 2.5 mW

Band 3: 2.2 mW

Full Band: 1.4 mW

Power Level Accuracy: Band 0:  $\pm 1.5$  dB

Band 1:  $\pm 1.3$  dB

Band 2:  $\pm 1.3$  dB

Band 3:  $\pm 1.4$  dB

Full Band:  $\pm 1.4$  dB

**Spurious Signals:** Harmonics and Subharmonics Band 0: 0.01 to 1.5 GHz,  $< -25$  dBc

Band 1:  $< -45$  dBc ( $< -20$  dBc typical)

Band 2:  $< -45$  dBc ( $< -20$  dBc typical)

Band 3: 14 to 20 GHz  $< -45$  dBc

Band 4: 26.5 to 40 GHz  $< -20$  dBc

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

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

**Power Sweep** Calibrated Range:  $> 15$  dB ( $> 12$  dB with Option 002) Accuracy (including linearity):  $\pm 1.5$  dB, typical Resolution (displayed): 0.1 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:  $\pm 75$  MHz 100 Hz to 1 MHz:  $\pm 7$  MHz 1 MHz to 2 MHz:  $\pm 5$  MHz 2 to 10 MHz:  $\pm 1$  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) 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  $\pm 25$  mV:  $< 1.06$  GHz 1 V/GHz  $\pm 2.5\%$  of reading: 1.0 to 18 GHz

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

**Net Weight:** 7.1 kg (15.7 lb)

**Shipping Weight:** 10.2 kg (22.5 lb)

**Furnished:** Operating/service manual