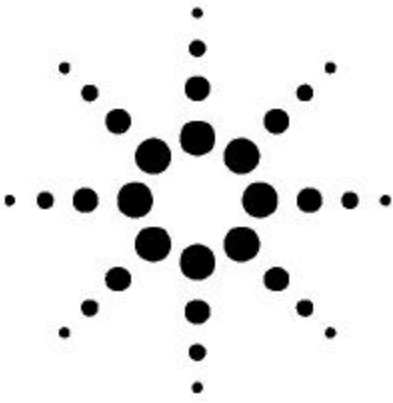


# Agilent 5384A Frequency Counter

## Data Sheet



### Channel A Characteristics

**Range:** 10 Hz to 100 MHz

**Sensitivity:** [MAIN LEVEL] off

15 mVrms sine wave 50 Hz to 100 MHz

25 mVrms sine wave 10 Hz to 50 Hz

45 mV pk-pk 5 ns minimum pulse width

**Dynamic Range:** 45 mV to 4 V pk-pk  $\times$  attenuator setting.

**Coupling:** AC

**Impedance:**

X1: 1 Mohm NOMINAL ||  $<25$  pF

X20: 500 kohm NOMINAL ||  $<25$  pF

**Attenuator:** X1 or X20 NOMIONAL, X20 increases to X40 below 50 Hz

**Low Pass Filter:** 100 kHz NOMINAL 3 dB point

### Channel B Characteristics

**Range:** 50 to 225 MHz

**Sensitivity:** 10 mVrms 50 to 200 MHz, 15 mVrms 200 to 225 MHz

**Dynamic Range:** 10 mV to 1 Vrms

**Coupling:** AC

**Impedance:** 50 ohm NOMINAL

**Attenuator Level:**

**Manual:** variable from X1 to X5 (0 to 14 dB) NOMINAL

**Auto:** AGC mode for improved noise suppression.

**Damage Level:** 350 VDC + 5 Vrms AC

## Timebase

**Frequency:** 10 MHz

**Aging Rate:**  $<3 \times 10^{-7}/\text{mo.}$

**Temperature:**  $<5 \times 10^{-6}$ , 0 degrees to 50 degrees C. Ref. to 25 degrees C.

**Line Voltage:**  $<1 \times 10^{-7}$  for  $\pm 10\%$  variation.

## Frequency A and B

**Range Channel A:** 10 Hz - 100 MHz

**Range Channel B:** 50 MHz - 225 MHz

**LSD Displayed:** 10 Hz to 1 nHz

**LSD**  $((4 \text{ nsec}) / (\text{Gate Time})) \times \text{FREQ}$

**Resolution:**  $\pm 1 \text{ LSD} \pm ((1.4 \times \text{Trigger Error} + 1 \text{ nsec rms}) / (\text{Gate Time})) \times \text{Freq}$

**Accuracy:**  $\pm \text{Resolution} \pm \text{Time Base Error} \times \text{Period}$

