1GHz Multifunction Counter

- 10Hz to 1GHz measurement range
- Frequency, Period and Totalize and Self Check modes
- 8 digit LED display
- X1 and X10 Input Attenuator
- 10 PPM temperature stability (oven controlled)
- Low power consumption and light weight
- 25mV sensitivity



B818

SPECIFICATIONS

Frequency Measurement

Channel A Input

Frequency Range: 10Hz to 10MHz Direct

10MHz to 100MHz Prescaled

Resolution: Direct: 1Hz, 10Hz, 100Hz (range dependent)
Prescaled: 10Hz, 100Hz, 1000Hz (range dependent)
Gate Time: 0.01s, 0.1s, 1s switch selectable
Accuracy: ±1 count ± (timebase error) X frequency

Coupling: AC Channel B Input

Frequency Range: 100MHz to 1GHz

Resolution: 100Hz, 1kHz, 10kHz, range dependent Gate Time: 0.027s, 0.27s, 2.7s in 3 decade switch settings Accuracy: ±1 count ± (timebase error) X frequency

Coupling: AC

Period Measurement

Channel A Input Range: 100ms to 4µs

Period Multiplier: X1 to X100 in 3 decade switch settings Resolution: 1ns, 10ns, 100ns range dependent Accuracy: ±1 count ± (timebase error) X Period

Totalized Measurement

Channel A Input

Frequency Range: 10Hz to 10MHz Count Capacity: 0 to 99,999,999 Resolution: ±1 input count

Input Characteristics

Channel A

Sensitivity:

10MHz Range: 25mV RMS (10Hz to 8MHz)50mV RMS (8MHz to 10MHz)

100MHz Range: 25mV RMS (10MHz to 80MHz)50mV RMS (80MHz to 100MHz)

Attenuation: X1 or X10 Input Impedance: $1M\Omega$ (C = < 35pF)

Max. Voltage: 250V DC and AC RMS

Channel B

Sensitivity: 20mV RMS Impedance: 50Ω

Max. Input Voltage: 3V DC or AC RMS

Timebase

Frequency: 10MHz & 3.90625MHz (Temperature controlled oven)

Stability:

Short Term: ±3x10⁻⁹ for 1 Sec Long Term: ±2x10⁻⁵ per month Temperature: ±1x10⁻⁵, 0 to 40°C

Line Voltage: ±1x10-7 for a 10% change in line voltage

Warm-up Time: 20 minutes

General Specifications

Display: 8 Digit LED with annunciators and decimal point Power Requirements: AC line voltage: 100/120/220/240V

±10%

Frequency: 48Hz to 66Hz

Power Consumption: Approx. 12VA Operating Temperature: -5 to 50°C Size: 3.0" H × 8.0" W × 10.0" D

Weight: 7 lbs.

Supplied Accessories: Manual, Power cord, BNC to Alligator

clip input cable