

- Sweep Function Generator and Frequency Counter
- Sine, Square, Triangle, Ramp, Pulse, Skewed Sine and TTL Square Waveforms
- 0.2Hz to 20MHz Frequency Output (Sine wave)
- Built-in 8 digit 3.0GHz Frequency Counter
- Internal and External linear Sweep control
- Variable Symmetry for generating Sawtooth (Ramp), Skewed Sine and Pulse Waveforms
- Variable DC Offset control
- Variable Output level control and 20 dB attenuator



B821

■ SPECIFICATIONS

[B821]

Output Characteristics

Frequency Range:

Sine wave: 0.2Hz to 20MHz

Square & Triangle wave: 0.2Hz to 10MHz

Range selection in 8 ranges (1,10,100,1K,10K,100K,1M,10M)

Output Level:

20 \pm 1 Vp-p in open circuit

10 \pm 0.5 Vp-p into 50 Ω Load

Waveforms:

Sine, Square, Triangle, Ramp, Pulse, Sawtooth, TTL Leveled Square

Attenuator: 20dB fixed and continuously variable (20dB)

Impedance: 50 Ω \pm 0.5%

Frequency Accuracy: \pm 5% of full scale

Waveform Characteristics

Sine Wave:

Flatness: \pm 3dB to 20MHz

Distortion: Less than 1.5 % at 0.2Hz to 100KHz

Duty error: Less than 10% in 50:50

Square Wave:

Rise and Fall Time: < 25ns at 10MHz

Triangle Wave: Linearity: More than 99% at 0.2Hz to 100KHz

TTL Output:

Rise and Fall Time: < 25ns at 10MHz

TTL Level: H \geq 2.4V, L \leq 0.4V

Symmetry Variation:

Sine & Square: 80:20 to 20:80 at 0.2Hz to 2MHz

Triangle: 80:20 to 20:80 at 0.2Hz to 1MHz

Sweep Function Characteristics

Mode: Linear

Width: Variable from 1:1 to 10:1

Rate: 0.5Hz to 50Hz (20ms to 2s)

External VCF Input:

Input Voltage: 0 to 10V

Input Impedance: Approx. 10K Ω

Frequency Counter Characteristics

Display: 8 digits Green LED, Overflow, Gate time, MHz, KHz, Hz

Frequency Range:

Input A: 0.1Hz to 100MHz

Input C: 80MHz to 3.0GHz

Accuracy: \pm Timebase Error \pm 1 count

Low pass Filter: -3 dB, 100KHz

Timebase: 10MHz TCO, 1 ppm

Input Sensitivity:

Input A (30mVrms): 0.1Hz to 80MHz

Input A (70mVrms): 80MHz to 100MHz

Input C (20mVrms): 80MHz to 2.0GHz

Input C (70mVrms): 2.0GHz to 3.0GHz with RG58 cable

Input C (40mVrms): 2.0GHz to 3.0GHz with RG400 cable

Max. Input Voltage:

Input A: 35Vp-p

Input C: 3Vrms

General Specifications

Power Requirements: 115/230VAC \pm 10%, 48 to 66Hz

Operating Temperature: 0 to 40°C (Accuracy specified at 23 \pm 5°C)

Size: 3.5" H x 9.5" W x 11.0" D

Weight: 6.6 lbs

Supplied Accessories: Manual, Line cord, BNC cable

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