

Data Sheet

Function Generators

Models 4001A & 4003A



4001A



4003A

Models 4001A and 4003A are 4 MHz sweep function generators. The sweep function offers linear or log sweep with variable sweep rates and widths. The model 4003A has the addition of a 50 MHz 5-digit external frequency counter.

Features

- Generates Sine, Triangle, & Square waveforms from 0.5 Hz to 4 MHz
- 20 Vpp output into open circuit (10 Vpp into 50 Ω)
- TTL output <25 ns
- ±10 V DC offset
- Variable amplitude output plus 20 dB attenuator
- Kensington security slot

4003A Additional Features

- CMOS variable level output
- 5-digit LED display
- Voltage Controlled Frequency (VCF) input



Kensington security slot helps secure your function generator and prevents theft.



| Model | 4001A | 4003A |
|---|--|------------------------------------|
| MAIN OUTPUT | | |
| Frequency Range | 0.5 Hz to 4 MHz in 6 Ranges | |
| Waveforms | 6 Waveforms (Sine, Square, Triangle, Ramp, +Pulse, -Pulse) | |
| Amplitude | 0.2 Vpp - 20 Vpp (no load), 0.1 Vpp - 10 Vpp (50 Ω load) | |
| Attenuator | -20 db (±2%) | |
| Output Impedance | 50 Ω (±2%) | |
| DC Offset | ±10 V (pull ADJ.) | |
| Distortion | <2%, 1 Hz to 100 kHz | |
| Rise/Fall Time | <90 ns | |
| VCF Input | 0 to 10 V control | |
| SYNC OUTPUT | | |
| Rise Time | <60 ns (TTL), <90 ns (CMOS) | |
| Level | approx. 3 Vpp (TTL), variable 4 Vpp - 14 Vpp [±0.5 Vpp] (CMOS) | |
| Waveforms | Square, Pulse | |
| SWEEP | | |
| Mode | Linear/Log Sweep | |
| Width | 1:1 to 1:100 Continuously Variable | |
| Rate | 5s to 10 ms Continuously Variable | |
| Sweep Output | 10 Vpp (open) | |
| Output Impedance | 1 kΩ ±2% | |
| FREQUENCY COUNTER | | |
| Display | - | 5-digit LED display with Autorange |
| Resolution | - | 0.01 Hz |
| MODE | - | INT Function Generator/EXT Counter |
| Accuracy | - | < 0.02% ± 1 digit |
| Frequency Range | - | 0.2 Hz~50 MHz |
| Sensitivity | - | <30 mVrms at 1 MHz |
| Max Input | - | <150 Vrms |
| Input Impedance | - | 1 MΩ ±2% |
| Power Source | AC 115V/230 V +10%, 50/60 Hz | |
| Dimension | 11" x 3.6" x 11.9" (279.4 x 91.4 x 302.3 mm) | |
| Net Weight | 5.5 lbs. (2.5 kg) | |
| | | One year warranty |
| Supplied Accessories: Power cord, user manual | | |