

BK Precision Function/Sweep Generator

Part No. 01FGBK4001BK

Back to [Generator](#) Main Page

| Specifications | model 4001A |
|----------------------------------|---|
| Frequency Characteristics | |
| Waveforms | Sine, Square, Triangle, Ramp, \pm Pulse |
| Range | 0.5Hz to 4MHz in 6 ranges |
| Tuning Range | Variable Multiplication factor of 0.04 to 4.0 of selected range |
| Resolution | 0.001Hz (model 4003A only) |
| Operating Modes | Normal, Sweep, VCF |
| Frequency Stability | Output will change less than 0.1% for 15 minutes after switching ON and it will change less than 0.2% for 24 Hours after switching ON. |
| Output Characteristics | |
| Impedance | 50 Ω \pm 2% |
| Level | Variable control From 0.1Vp-p (No Load) 0.05Vp-p (50 Ω Load) To 20Vp-p (No Load) \pm 1Vp-p 10Vp-p (50 Ω Load) \pm 0.5Vp-p |
| Attenuation | -20dB \pm 2% |
| DC Offset | Variable: \pm 10V open circuit, \pm 5V into 50 Ω |
| Sine Wave | |
| Distortion | Less than 2% (1Hz - 100kHz) |
| Harmonic Ratio | <30dB, 100kHz to 4MHz |
| Frequency Response | <0.1dB, upto 100kHz <1dB, 100kHz to 4MHz |
| Triangular Wave | |
| Symmetry | 50% (Positive Half) to 50% (Negative Half) <2%, 1Hz to 100kHz |
| Ramp Wave | |
| Frequency Range | 0.5Hz to 3.5MHz |
| Symmetry | 80% (Rise Wave) to 20% (Fall Wave) <5%, 1Hz to 100kHz |
| Rising Wave linearity | <2%, 1Hz to 100kHz |
| Square Wave | |
| Symmetry | 50% (Positive Half) to 50% (Negative Half) <2%, 1Hz to 100kHz |
| Rise Time | <90nS, (20Vp-p, No Load) |

Continued on Page 2

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| Positive Pulse | |
| Frequency Range | 0.5Hz to 3.5MHz |
| Symmetry | 20% to 80%, <5%, 1Hz to 100kHz |
| Rise Time | <90nS, (20Vp-p, No Load) |
| Negative Pulse | |
| Frequency Range | 0.5Hz to 3.5MHz |
| Pulse Width | 15% of time period of the Set Frequency |
| Symmetry | 80% to 20%, <5%, 1Hz to 100kHz |
| Rise Time | <90nS, (20Vp-p, No Load) |
| Synchronous Output | |
| Impedance | 50 \pm 2% |
| Level (TTL) | Approx. 3Vp-p fix amplitude |
| Level (CMOS) | Adjustable 5V to 14.5Vp-p (\pm 0.5 Vp-p) |
| Rise Time (TTL) | <60nS |
| Rise Time (CMOS) | <90nS |
| VCF Input (model 4003A only) | |
| Input Level | 0 to 10V |
| Input Frequency | DC to 1kHz |
| Sweep Operation | |
| Operating Mode | Linear/ LOG |
| Sweep Rate | 5 sec to 25ms |
| Width | 1:1 to 1:100 |
| Sweep Synchronous Output | |
| Output waveform | Linear/ LOG ramp wave |
| Amplitude | 10Vp-p (No Load) +/- 0.8Vp-p |
| Frequency Counter (model 4003A only) | |
| Display | 5 digit, Auto range |
| Display Unit | Hz/ kHz auto range |
| Resolution | 0.01Hz (max.) |
| Accuracy | <0.02% \pm 1 digit |
| Temp coefficient | <10PPM / $^{\circ}$ C |
| External Counter (model 4003A only) | |
| Max. Input Voltage | <150mV rms |
| Input Frequency | 0.1Hz to 60MHz |
| Coupling | HF - for more than 100kHz LF - With 100kHz filter for less than 100kHz |
| Sensitivity | <30mV rms (1MHz) |
| Power Source: 115V AC \pm 10%, 50/60Hz, fuse 600mA or 230V AC \pm 10%, 50/60Hz, fuse 300mA | |
| Operating Environment | |
| Temperature | 0 to 40 $^{\circ}$ C |
| Humidity | 10% to 80% |
| Storage | |
| Temperature | -20 $^{\circ}$ C to 70 $^{\circ}$ C |
| Humidity | 0% to 90% |
| Dimensions (W x H x D): 11 x 3.6 x 11.9" (275 x 90 x 300 mm) | |
| Weight: 5.5 lbs. (2.5 Kg) | |
| Accessories: Power Cord, User's Manual | |