

BK Precision Function/Sweep Generators

Part No. 01FGBK4003BK

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Specifications	model 4003A
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)

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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	50Ω ±2%
Level (TTL)	Approx. 3Vp-p fix amplitude
Level (CMOS)	Adjustable 5V to 14.5Vp-p (±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% ±1 digit
Temp coefficient	<10PPM / °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 ±10%, 50/60Hz, fuse 600mA or 230V AC ±10%, 50/60Hz, fuse 300mA	
Operating Environment	
Temperature	0 to 40°C
Humidity	10% to 80%
Storage	
Temperature	-20°C to 70°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	