



Model 4012A

5 MHz Sweep Function Generator

Data Sheet

Specifications		models
		4012A
Frequency Characteristics		
Waveforms	Sine, Square, Triangle, \pm Pulse, \pm Ramp	
Range	0.5 Hz to 5 MHz	
	in 8 ranges	
Resolution	4 digits	
Tuning Range	10:1	
Fine	$\pm 5\%$ of coarse setting	
Variable Duty Cycle	15:85:15 cont variable	
Operating Modes	Normal, Sweep, VCG	
Output Characteristics		
Impedance	50 Ω $\pm 10\%$	
Level	20 V p-p Open circuit, 10V p-p into 50 Ω	
Amplitude	Variable, 20 dB range typical	
Attenuation	-20 dB ± 1 dB	
DC Offset	Preset ± 0.1 V typ Variable: ± 10 V open-circuit ± 5 into 50 Ω	
SINE Wave		
Distortion	$\leq 3\%$ typical at 1 kHz	
Flatness (Into 50 Ω)	$\pm 5\% \pm (.45 \text{ dB})$ 0.5 Hz to 5 MHz	
Square wave		
Symmetry	0.1 Hz to 100 kHz $< 2\%$	
Rise time (Into 50 Ω)	≤ 30 nS	
Triangle Wave	Linearity: $\geq 98\%$ to 100 kHz	
TTL Output		
Level	0.8V to 2.4V	
Rise time	≤ 20 nS (Between 0.8V to 2.4V)	
Duty Cycle	50% typical	
CMOS Output		
Max. Frequency	2 MHz	
Level	4V to 14V ± 0.5 p-p cont. variable	
Rise Time	≤ 120 nS (Open circuit)	
VCG (Voltage controlled generator)		
Input Voltage	0-10V ± 1 V causes a 100:1 frequency change	
Impedance	10k Ω $\pm 5\%$	
Sweep Operation		
Mode	LIN/LOG	
Width	100:1 continuously variable	
Rate	0.5 s to 30 s cont variable	
Start/Stop Frequencies	NA	
Frequency Counter		
Accuracy	Time base accuracy ± 1 count	
Time Base Accuracy	± 10 ppm ($23^\circ \pm 5^\circ\text{C}$)	
Display	5 digit LED	
Mode	INT	
External Input		
Frequency	Does not apply	
Resolution	0.1, 1, 10, 100, 1 kHz	
Sensitivity	25mVrms	
Power Source	120/230 VAC $\pm 10\%$ 50/60 Hz, internal jumper selectable	



Model 4012A

5 MHz Sweep Function Generator

- 0.5 Hz to 5 MHz
- Sine, Square, Triangle, Pulse, & Ramp output
- Coarse and Fine tuning
- 4 digit LED display
- Linear and log sweep
- Variable duty cycle
- Variable DC offset
- Variable amplitude output plus 20dB attenuator
- 20Vpp output into open circuit (10Vpp into 50 Ω)

B&K Precision Corporation

22820 Savi Ranch Parkway, Yorba Linda, CA 92887
 Tel: 714-921-9095, Fax: 714-921-6422
 www.bkprecision.com

Specifications subject to change without notice