



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)	$\pm 5\% \pm (.45$ 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 $^{\circ}$ $\pm 5^{\circ}$ 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)