

Function Generators



4040A



4017A

Specifications

models

	4040A	4017A
Frequency Characteristics		
Waveforms	Sine, Square, Triangle, ±Pulse, ±Ramp	
Range	0.2 Hz to 20 MHz in 8 ranges	0.1 Hz to 10 MHz in 8 ranges
Resolution	5 digits	5 digits
Tuning Range	10:1	10:1
Fine	±5% of coarse setting	±5% of coarse setting
Variable Duty Cycle	15:85:15 cont variable	15:85:15 cont variable
Operating Modes	Normal, sweep, VCG, AM, FM, burst	Normal, sweep, VCG
Output Characteristics		
Impedance	50Ω ±10%	
Level	20 V p-p Open circuit, 10V p-p into 50Ω	
Amplitude	Variable, 20 dB range typical	
Attenuation	-20 dB ±1dB	
DC Offset	Preset ±0.1 V typ Variable: ±10V open-circuit ±5 into 50Ω	
SINE Wave		
Distortion	≤3% typical at 1 kHz	
Flatness	±5%±(.45 dB) 0.1 Hz to 8 MHz ±20%±(2.0 dB) 8 MHz to 20 MHz (10MHz 4017A) @3Vp-p	
Square wave		
Symmetry	0.2 Hz to 100 kHz <2%	0.1 Hz to 100 kHz <2%
Rise time	≤ 30 ns	
Triangle Wave	Linearity: ≥ 98% to 100 kHz	
TTL Output		
Level	0.8V to 2.4V	
Rise time	≤ 20 nS	
Duty Cycle	50% typical	
CMOS Output		
Max. Frequency	2 MHz	
Level	4V to 14V ±0.5 p-p cont. variable	
Rise Time	≤ 120 nS	
VCG (Voltage controlled generator)		
Input Voltage	0-10V ±1V causes a 100:1 frequency change	
Impedance	10kΩ ±5%	
Sweep Operation		
Mode	LIN/LOG	
Width	100:1 continuously variable	
Rate	20 ms to 2 s cont variable	0.5 s to 30 s cont variable
Sweep Output	0 to 2V	0 to 10V
Start/Stop Frequencies	Adjustable	NA
Frequency Counter		
Accuracy	Time base accuracy ±1 count	
Time Base Accuracy	±10 ppm (23° ±5°C)	
Display	5 digit LED	
Mode	INT or EXT	NA
External Input		
Frequency	5 Hz to 30 MHz	Does not apply
Resolution	0.1, 1, 10, 100, 1 kHz	
Sensitivity	25Vrms	
Power Source	120/230 VAC ±10% 50/60 Hz, internal jumper selectable	
Dimensions	5.5 x 11.75 x 10.575" (140 x 298 x 264mm)	4.5x 11.75 x 10.575" (114 x 298 x 264mm)
Weight	4.5 lbs. (2 kg)	4 lbs. (1.8 kg)

Model 4040A

20 MHz Sweep/Function Generator with Frequency Counter

- 0.2 Hz to 20 MHz
- AM & FM modulation
- Burst operation
- External frequency counter to 30 MHz
- 5 digit LED display
- All features of Model 4017A

Model 4017A

10 MHz Sweep/Function Generator with Digital Display

- 0.1 Hz to 10 MHz
- Linear and log sweep
- 5 digit LED display
- All features of Model 4017A

Specifications

model

	4040A
AM MODULATION CHARACTERISTICS	
Source	Internal, External
Modulation Ratio	0 to 100%
Int modulation	1 kHz
Ext Modulation	DC to 500 kHz
Ext Sensitivity	Less than 10V p-p for 100% modulation
FM MODULATION CHARACTERISTICS	
Source	Internal, External
Modulation Ratio	0 to 100%
Deviation	0 to 5%
INT Modulation	1 kHz
Ext Modulation	DC to 500 kHz
Ext Sensitivity	Less than 10V p-p for 100% modulation
BURST CHARACTERISTIC	
Source	Internal, External
Burst Width	Cont. variable from 5% to 90% of internal gating frequency
Repetition Rate	0.5 Hz to 50 Hz, internal DC to 500 kHz external
External Level	TTL levels
Burst Frequency	Determined by main generator frequency setting

Accessories

Two Year Warranty

SUPPLIED: Output Cable with BNC to Alligator Clips, Instruction Manual
Carrying Case (not included): LC-40