

Versatile Function Generator



FEATURES :

- * Built-in Two Function Generators
- * Frequency Range: 0.1Hz ~ 13MHz
- * Output Waveforms: Sine, Square Triangle, Ramp, Pulse, AM, FM, Sweep, Triggered and Gates
- * Built-in 6 Digit Counter with Ext Function
- * INT/EXT AM, FM Modulation
- * GCV Output for Synchronization
- * Three step (-20dB, -40dB, -60dB) and Variable Attenuator
- * VCF for 1000:1 EXT Frequency Control
- * Output Overload Protection

GFG-813 (13MHz)

SPECIFICATIONS

MAIN OUTPUT	Waveforms Amplitude Impedance Attenuator DC Offset Variable Symmetry Frequency Range	Sine, Square, Triangle, ± Ramp, Pulse, AM, FM, Sweep, Triggered and Gated. >20Vp-p open circuit, >10Vp-p into 50Ω load (at 1kHz) 50Ω ±10% 1:1, 10:1, 100:1, 1000:1 and > 10:1 continuous control < -10V to > +10V, < -5V to > +5V (50 ohm load) 80:20:80 to 1MHz 0.1Hz to 13MHz in 8 Decade ranges
SINE WAVE	Distortion Flatness	< 0.5% (-46dB) THD from 10Hz ~ 50kHz > 30dB below fundamental from 50kHz ~ 13MHz < ±3% from 10Hz ~ 100kHz, < ±10% from 100kHz ~ 10MHz
TRIANGLE WAVE	Linearity Error	< 1% at 100Hz
SQUARE WAVE	Symmetry Rise/Fall Time	< 2% 0.1Hz ~ 100kHz < 20nS
SYNC OUTPUT	Impedance Level	50Ω ±10% > 1Vp-p open circuit
MODULATION CHARACTERISTICS	Types Wave Forms Frequency Range Output Level	AM, FM, Sweep, Trigger, Gate or Burst (INT and EXT) Sine, Square, Triangle, Ramp or Variable Symmetry pulse 0.01Hz ~ 10kHz in 3 Ranges > 1Vp-p into 10kΩ
AMPLITUDE MODULATION	Depth Modulation Frequency Carries-3dB Bandwidth External Sensitivity	0 ~ 100% 0.01Hz ~ 10kHz (internal), DC to 1MHz (external) < 100Hz to > 5MHz < 10Vp-p for 100% modulation
FREQUENCY MODULATION	Deviation Modulation Frequency	0 to ± 5% (internal) 0.01Hz ~ 10kHz (internal), DC to 50kHz (external)
SWEEP CHARACTERISTICS	Sweep Width Sweep Rate Sweep Mode Ramp Output	> 100:1 0.01Hz ~ 10kHz, 90:10 ramp Linear sweep and symmetry control 0 to > -4Vp-p into 5kΩ
GATE CHARACTERISTICS	Start/Stop Phase Range Frequency Range Ext Gate Frequency Range	+90° to -80° 0.1Hz to 1MHz (Max. to 10MHz) DC to 1MHz, TTL Compatible
VCF	Range Input Linearity Input Impedance	1000:1 (0 to -2V±20%) < 0.5% to 1MHz, < 5% to 10MHz (Dial set at 10) 2.8kΩ ± 5%
GCV OUTPUT		0 to +2V proportional to dial setting or sweep frequency
FREQUENCY COUNTER	Display INT./EXT. Accuracy Time Base Resolution Range EXT. Sensitivity	6 Digits (0.3" LED Display) Switch selector ± Time base accuracy ± 1 count Oscillation frequency 10MHz ± 10PPM (23°C ± 5°C) 0.1Hz, 1Hz, 10Hz, 100Hz, 1kHz 0.1Hz to 13MHz (EXT. 5Hz ~ 30MHz) < 20mVrms
POWER SOURCE		AC100V/120V/220V/240V ± 10%, 50/60Hz
ACCESSORIES		Power cord x 1, Instruction manual x 1, GTL-101 x 2
DIMENSIONS & WEIGHT		310(W) x 99(H) x 380(D) mm, Approx. 7.2kg

C2

ISO-9001 & ISO-14001