

5MHz Function Generator With Frequency Counter & Sweep Mode



Products

Low cost

Feature:

Frequency Range: 0.3Hz~3MHz 8291A 0.5~5MHz 8255A

Waveforms: Sine, Triangle, Square, Ramp, TTL and COMS output

External voltage controlled frequency (VCF) function

Duty cycle control with signal inversion capability

Variable DC offset control

Two-step (-20db X 2) and variable attenuator

Specifications:

1. Main :

Frequency Range 0.3HZ~3MHZ/0.5Hz~5MHz (7 Range)

Amplitude $\geq 10V_{pp}$ (into 50 Ω load)

Impedance 50 $\Omega \pm 10\%$

Attenuator -20dB $\pm 1dB \times 2$

DC Offset $< -5V \sim > 5V$ (into 50 Ω load)

Duty Control 80%:20%:80% to 1MHz Continued variable

Display 6 digits LED display

2. Sine Wave

Distortion $\leq 1\%$, 0.3HZ~200kHz

THD $\leq 35dB$ below fundamental in all range (Specification applied from MAX. to 1/10 level).

Flatness <0.3dB, 0.3Hz~300kHz

<0.5dB, 300kHz~3MHz

3. Triangle Wave

Linear $\geq 98\%$, 0.3Hz~100kHz

$\geq 95\%$, 100kHz~3MHz

4. Square Wave

Symmetry $\pm 2\%$, 0.3Hz~100kHz

Rise or Fall Time $\leq 100\text{ns}$ at maximum output (into 50Ω load)

5. COMS Output

Level $4\text{Vpp} \pm 1\text{Vpp} \sim 14.5\text{Vpp}$

$\pm 0.5\text{Vpp}$ adjustable

Rise or Fall Time $\leq 120\text{ns}$

6. TTL Output

Level $\geq 3\text{Vpp}$

Fan Out 20 TTL load

Rise or Fall Time $\leq 25\text{ns}$

7. VCF

Input Voltage $0\text{V} \sim 10\text{V} \pm 1\text{V}$ (100:1)

Input Impedance $10\text{K}\Omega \pm 10\%$

8. GCV

Output Voltage To set the voltage between $0\text{V} \sim 2\text{V}$ as per different frequency.

9. Sweep Operation

Sweep/Manual Switch selector

Sweep/Rate 100:1 ratio max. and adjustable

Sweep/Time 0.5Sec~30Sec adjustable

Sweep/Mode Lin./Log. Switch selector

10. Amplitude Modulation

Depth $0 \sim 100\%$

MOD.Freq. 400Hz (INT), DC~1MHz (EXT)

Carrier BW 100Hz~3MHz (-3dB)

EXT Sensitivity $\leq 10\text{Vpp}$ for 100%

modulation

11. Frequency

Deviation $0 \sim \pm 5\%$

MOD.Freq. 400Hz (INT), DC~20kHz (EXT)

EXT Sensitivity $\leq 10\text{Vpp}$ for 10% modulation

12. Frequency Counter

Int./Ext. Switch selector

Range $0.3\text{Hz} \sim 3\text{MHz}$ ($5\text{Hz} \sim 100\text{MHz}$ EXT)

Accuracy Time base accuracy ± 1 count

Time Base $\pm 20\text{ppm}$ ($23\text{ } \square \pm 5\text{ } \square$) after 30minutes warm up

Resolution The maximum resolution 10Hz for 1Hz and 0.1Hz for 100MHz

Input Impedance $1\text{M}\Omega/150\text{pF}$

Sensitivity $\leq 35\text{mVrms}$ ($5\text{Hz} \sim 80\text{MHz}$)

45mVrms ($80\text{MHz} \sim 100\text{MHz}$)

13.General

Power Source AC115V/230V±15%, 50/60Hz

Operation Environment Indoor use, altitude up to2000m.

Ambient Temperature 0℃~40℃.

Relative Humidity 80%(Maximum).

Installation category II;

Pollution Degree 2 .

Storage temperature & Humidity -10℃~70℃,
70%(Maximum).

Accessories Power code × 1

Testing code ×1

Instruction manual × 1

Dimension 251(W)× 91(H)× 291(D) mm

Weight 2.2kgs-MFG-8219A

2.4kgs MFG-8255A