

5MHz Function Generator With Frequency Counter



Products

Low cost

Feature:

Frequency Range: 0.3Hz~3MHz/0.5Hz~5MHz

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:

MFG-/8216A/8250A

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~>5V (into 50 Ω load)

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

Display 6 digits LED display

*MFG-8215A does not have display.

Range Accuracy $\pm 5\% + 1\text{HZ}$ (at 3.0 position)

*only for MFG-8215A.

2.Sine Wave

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

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

Flatness $< 0.3\text{dB}$, 0.3Hz~300kHz

$< 0.5\text{dB}$, 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.Frequency Counter

Int./Ext. Switch selector

Range 0.3Hz~3MHz (5Hz~100MHz 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 $1\text{M}\Omega/150\text{pF}$

9.General

Power Source AC115V/230V $\pm 15\%$, 50/60Hz

Operation

Environment Indoor use, altitude up to 2000m.

Ambient Temperature $0\text{ } \square \sim 40\text{ } \square$.

Relative Humidity 80%(Maximum).

Installation category II;

Pollution Degree 2 .

Storage temperature & Humidity $-10\text{ } \square \sim 70\text{ } \square$,

70%(Maximum).

Accessories Power code $\times 1$

Testing code $\times 1$

Instruction manual × 1

Dimension 251(W)× 91(H)× 291(D) mm

Weight Approx.

2.1kgs-MFG-8216A

2.3kgs MFG-8250A