

Specifications

(Reference Temperature: 23°C ± 1°C)

Operating Modes:

Internal, external or manual triggering

Frequency Range:

2Hz to 20MHz (7 decades)

Variable Control (>10:1), overlapping ranges

Symmetric Square Wave:

Pulse Duty Cycle 50% ±10ns to 2MHz,

50% ±5% ±10ns from 2MHz to 20MHz

Jitter: ≤±0.1%

Pulse Duration: 20ns to 200ms

in 7 decade steps

Variable Control (>10:1), overlapping ranges

Jitter: ≤±0.1%

Single Pulse (via pushbutton)

Pulse Duration: ≤20ns to ≥200ms

Pulse Characteristic:

Risetime/Falltime: ≤3ns +(0.04ns/°C);

$U_a \leq 4V$, 10-90%

Overshoot: ≤5% of pulse amplitude

Top Ripple: ≤±5% of pulse amplitude

(10ns after pulse step; 2Hz-2MHz)

Preshoot: ≤±5% of pulse amplitude

Dual-Outputs (short-circuit proof)

+ Amplitude: max. +5V into 50Ω

variable from +2V to +5V

- Amplitude: max. -5V into 50Ω

variable from -2V to -5V

Attenuator: 1:2.5 (-8dB)

(variable from ±0.8V to ±5V)

Output Impedance: 50Ω (both outputs)

External Trigger Input:

Pulse Repetition Frequency: 0 to 20MHz

Pulse Duration: 20ns min.

Trigger Delay: approx. 20ns

Trigger Level: Sinewave >1V_p or

TTL-compatible square wave >1V

Max. Input Voltage: ±30V

Fan in = 1

Trigger Output (short-circuit proof)

Amplitude: 0/+1.9V into 50Ω, 0/<+4V open circuit

TTL-compatible; fan-out: 5

Risetime/Falltime: approx. 10ns

Aberration:

approx. ±10% of pulse amplitude

Pulse Duty Cycle:

identical to non-inverted signal

Delay: approx. 10ns, leading

General Information:

Supply voltages (from HM8001): +5V/250mA

+20V/260mA; -20V/270mA

(Σ11.9W)

Operating conditions: +10°C to +40°C

max. relative humidity: 80%

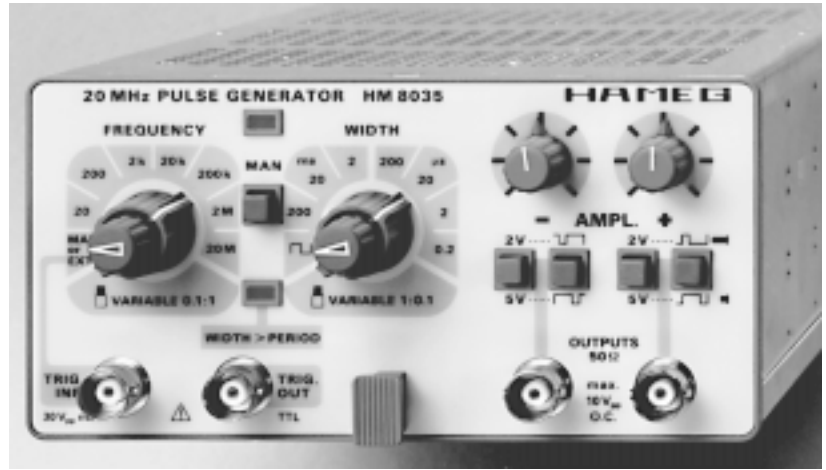
Dimensions (without 22-pin flat connector):

W 135, H 68, D 228mm

Weight: approx. 800g

Values without tolerances are meant to be guidelines and represent characteristics of the average instrument.

Subject to change without notice



Pulse Generator HM8035

- Frequency Range: 2Hz to 20MHz
- Pulse Duration: 20ns to 200ms
- Pulse Duty Factor: up to 99.9999
- Risetime: <3ns.
- 2 Separate Outputs (+/-)
- Single Pulse Capability
- Indicator WIDTH > PERIOD

The **HM8035 Pulse Generator** is designed for analog and digital circuit stimulus in the laboratory and the field. Key features are the **short rise time** output, better than 3ns and typically **2ns** and the flexibility of pulse duration and duty cycle from **square-wave** through to **narrow, sliver-type pulses**. Rise and fall time remain constant while the pulse width is modified. The instrument also offers **manual triggered** pulse initiation, via push-button and a TTL-compatible trigger output. A **"WIDTH>PERIOD"** indicator signals the operator that a non-realizable ratio of pulse width to repetition rate has been entered.

The output signal is available with either positive or negative polarity at **two** individual outputs, which are each independently adjustable from **0.8 to 5V_{pp}**. Some applications of the **HM8035** are the measurement of **rise times** and the analysis of the **transient response** of wide-band amplifiers. A TTL-compatible signal is provided for the triggering of other instrumentation. The **HM8035** presents itself as a low-cost alternative to more expensive laboratory instruments.

Accessories supplied
Operators Manual

Optional accessories
BNC test cable HZ33, HZ34
50Ω through termination
HZ22

