

20 MHz Pulse Generator SM5035



- Wide Frequency Range 20 mHz to 20 MHz
- Pulse Duration 20 ns to 20 s
- Fast Rise/ Fall Time ≤ 3 ns
- Complementary Dual Outputs
- Internal, External & Manual Triggering
- Single Pulse Capability, Indicator Width $>$ Period

Technical Specifications

Operating Modes	: Internal, external or manual trigger
Frequency Ranges	: 20 mHz to 20 MHz In 9 decade steps, Variable control $> 0.1:1$
Pulse Duration	: 20 ns to 20 s In 9 decade steps, Variable control $> 1:0.1$
Symmetric Square Wave	
Pulse Duty Factor	: 50 % \pm 10 ns up to 2 MHz 50 % \pm 5 % \pm 10 ns from 2 MHz to 20 MHz
Jitter	: $\leq \pm 0.5$ %
Single Pulse	
Pulse Duration	: ≤ 20 ns to ≥ 20 s
Pulse Characteristics	
Rise Time/Fall Time	: ≤ 3 ns (10 % to 90 %)
Overshoot	: ≤ 5 % of pulse amplitude
Top Ripple	: $\leq \pm 2$ % of pulse amplitude
Preshoot	: $\leq \pm 2$ % of pulse amplitude
Dual-outputs	
+ Amplitude	: Max.+5 V into 50 Ω against ground, variable from +2 V to +5 V
- Amplitude	: Max.-5 V into 50 Ω against ground, variable from -2 V to -5 V

Attenuators : 1 : 2.5 (-8 dB) variable from ± 0.8 V to ± 5 V

Output Impedance : 50 Ω (both outputs)

External Trigger Input

Pulse Repetition Freq. : 0 to 20 MHz

Pulse Duration : 20 ns min

Trigger Delay : Approx. 20 ns

Trigger Level : Sine wave > 1 Vp or TTL

Compatible Square Wave $> +1$ V

Max. Input Voltage : 30 V pp. Fan in = 1

Trigger Output (Short-Circuit-proof)

Amplitude : 0/ +1.9 V into 50 Ω , 0/ $<$ 4 V Open Circuit

TTL compatible; fan-out = 5

Rise Time/Fall Time : Approx. 10 ns.

Aberration : Approx. ± 10 % of pulse amplitude

Pulse Duty Cycle : Identical to non-inverted signal

General Information

Operating Conditions : + 0°C to 40°C. 95 % RH

Supply : 230 V AC, ± 10 %, 50 Hz

Power Consumption : 18 V A (approx.)

Dimensions : W 196, H 80, D 237 mm

Weight : 2.8 Kg (approx.)

(Subject to change)