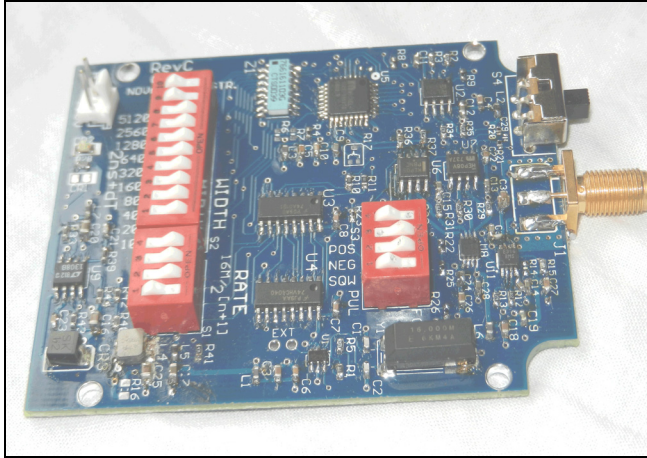


NOVATECH INSTRUMENTS, INC.

16 MHz Variable Pulse Generator Model Pulse1



The Model Pulse is a 16 MHz variable pulse generator. The square wave output rate is selectable from 8 MHz to 62.5 kHz in octave steps (twice this for pulses). Three functions are available: positive pulse, negative pulse and square wave. The pulse width is variable from approximately 2 ns to 12 ns in 10 ps steps. The pulse width is selected via a 10-position DIP switch. The rate and function are selected by separate 4-position DIP switches. The output is available on a right angle SMA connector.

Specifications:

OUTPUT

TYPES: Square wave, positive or negative pulse.

IMPEDANCE: 50Ω.

SQUARE WAVE: 62.5 kHz to 8 MHz in 8 steps.

PULSE WIDTH: approx. 2 ns to 12ns in 10 ps steps (10-bits), 125 kHz to 16 MHz in 8 steps.

AMPLITUDE: CML approx. 300 mV_{pp} when terminated into 50Ω (optional LVCMOS). t_r , t_f < 500 ps (20% to 80%).

CONTROL

DIP switches allow setting output type (4 position), rate (4 position) and pulse width (10 position).

ACCURACY AND STABILITY

Accuracy of $\pm 0.01\%$ at 20°C and a stability of $\pm 0.005\%$ from +5 to +40°C.

POWER REQUIREMENTS

Two LR6 (AA) alkaline cells power the Pulse1 for at least 4 hours of continuous operation. DC voltage input of 2.65 to 2.95 V (2.8 V $\pm 5\%$), at <0.5 A for bench or embedded use. Two-cell holder provided.

SIZE

63.5mm by 76mm, not including connectors.

ENVIRONMENTAL

Temperature: +5°C to +50°C operating.

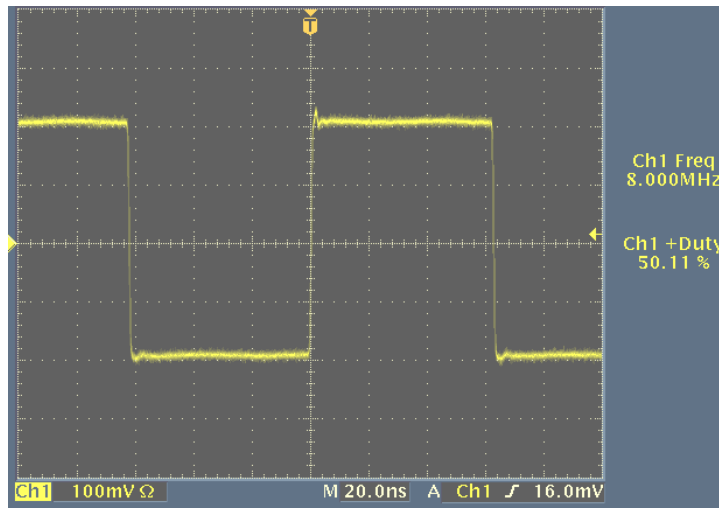
Humidity: 80% to 31°C, decreasing linearly to 50% at 40°C.

CONNECTORS

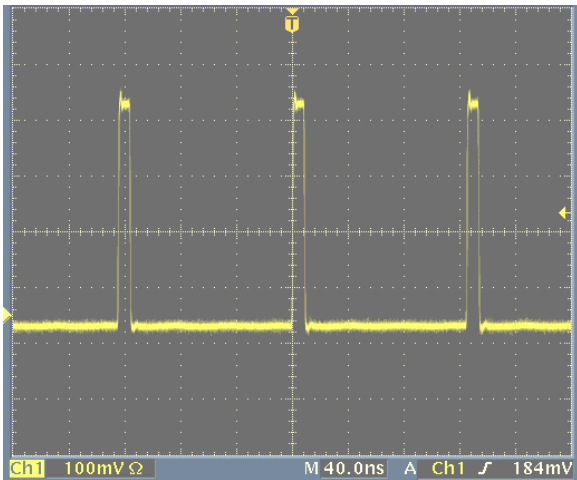
SMA for output. 2-pin friction lock header (AMP MTA or equivalent) for power input.

7-Mar-2012

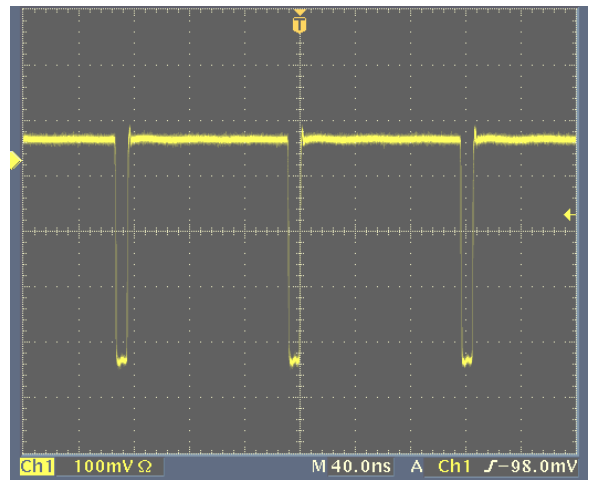
MODES



Square Wave



Positive Pulse



Negative Pulse

