

# AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS SINCE 1975

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BOX 5120, LCD MERIVALE OTTAWA, CANADA K2C3H5

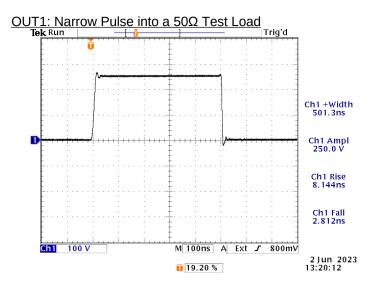
# PERFORMANCE CHECKSHEET

Model: AVR-3-PW-TEK3-B-P-CT

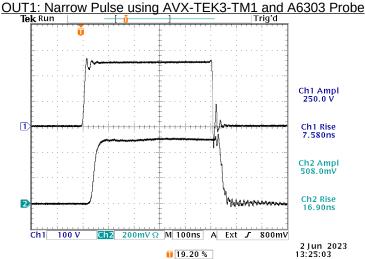
Type: High-Speed Current Probe Test System

S.N.: 14346

Date: June 2, 2023



Output of "OUT1" connector, terminated into an external 50 Ohm test load. Viewed with TDS3052 scope. 100V/div, 100 ns/div. 10 Hz.



Top: +250V voltage waveform (measured at clamping cable). Bottom: Output of A6303 probe, viewed with TDS3052 scope. The A6303 probe is clamped to the shorting cable.

a) Output Signal Amplitude (to  $50\Omega$ ): OUT1: 0 to +250V (+5A max.)

OUT2: 0 to +50 V (+1A max.)

b) Pulse Width:

OUT1: 250 ns to 250 us OUT1: 50 ns to 200 ns

c) Rise Time (20-80%):

OUT1: < 10 ns OUT2: < 0.5 ns

d) Fall Time (80-20%):

OUT1: < 10 ns OUT2: < 0.5 ns

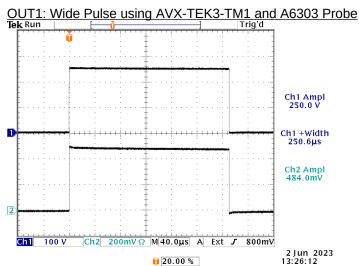
e) PRF: 0 - 10 kHz

f) Jitter, Stability: OK

g) Prime Power: 100-240V AC, 50-60 Hz.

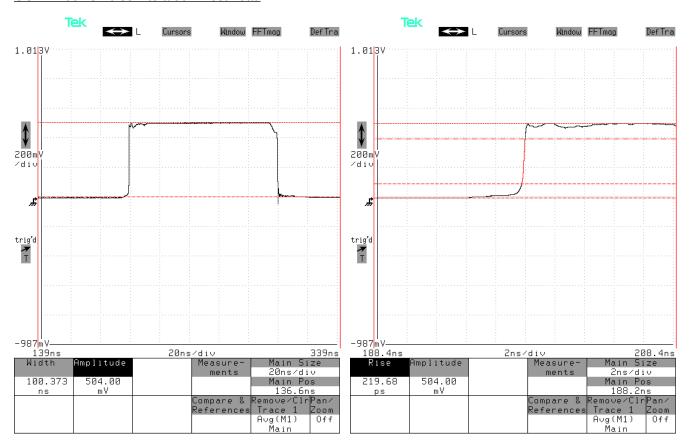
The current probes used in obtaining these waveforms are not calibrated, and are for examples purposes only. The amplitudes from the probes may be out of tolerance.

All rise/fall references levels: 20%, 80%.



Top: +250V voltage waveform (measured at clamping cable). Bottom: Output of A6303 probe, viewed with TDS3052 scope. The A6303 probe is clamped to the shorting cable.

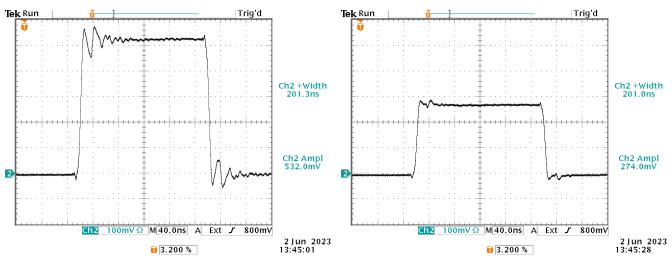
### OUT2: 100 ns Pulse into a 50Ω Test Load



20 V/div (200 mV/div x 40 dB), 50 ns/div. "OUT2" into a sampling oscilloscope.

Same, but scaled at 2 ns / div to show rising edge.

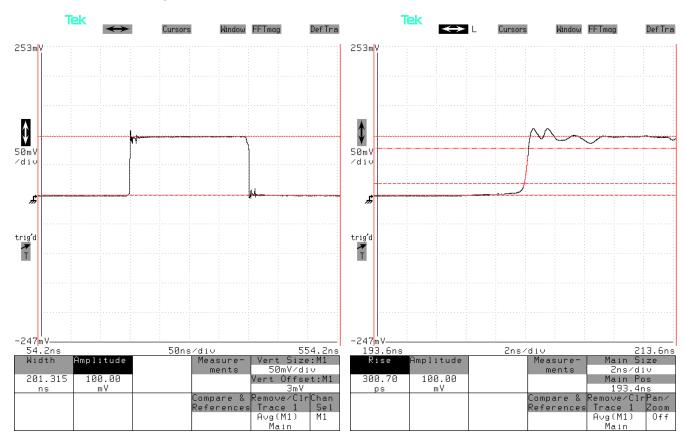
#### OUT2: 200 ns Pulse using AVX-TEK3-TM2 and P6042 Probe



Output of P6042 probe, viewed with TDS3052 scope. The P6042 probe is clamped to the shorting cable.

Output of P6042 probe, with a 6 dB attenuator installed between the OUT2 connector and the cable to the output module. The 6 dB attenuator tends to absorb transmission line reflections.

### OUT2: 200 ns Pulse using AVX-TEK3-TM3 and CT2 Probe



Output of CT2 with a +50V/1A input. 500 mV/div (50 mV/div x 20 dB), 50 ns/div. "OUT2" into a sampling oscilloscope.

Same, but scaled at 2 ns / div to show rising edge.