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BOX 5120, LCD MERIVALE
OTTAWA, CANADA K2C3H5

PERFORMANCE CHECKSHEET

Model: AVO-9A3-B-P-P1B-T1B
Type: Ultra-High-Speed Laser Diode Driver
S.N.: 13939
Date: December 16, 2019

Output Amplitude: up to +43V, to 50Ω
Pulse Width (FWHM): 0.4 – 2 ns
Rise Time (20%-80%): ≤ 200 ps
Fall Time (80%-20%): ≤ 300 ps
PRF: 1 Hz – 1 MHz
Jitter, Stability: OK
Prime Power: 100-240V AC, 50-60 Hz.

Basic specifications: →

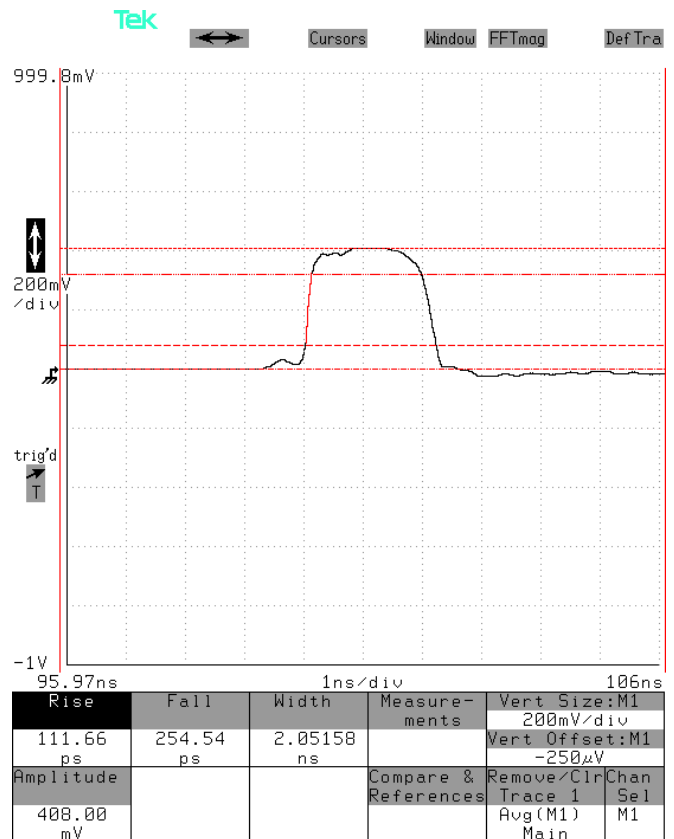
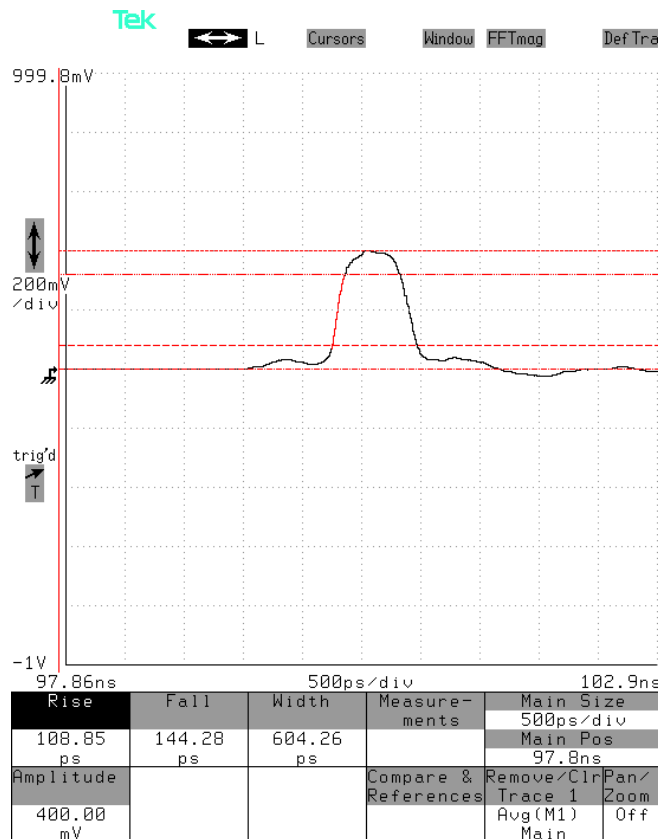
Test Waveforms

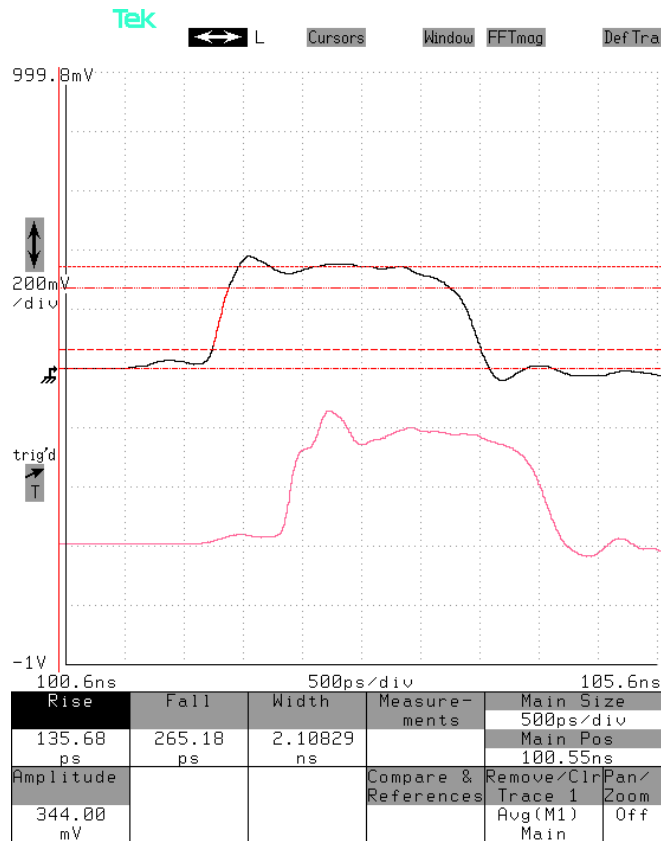
Mainframe output into 50 Ohm load at 10 kHz,
600 ps, +40V,

Mainframe output into 50 Ohm load at 10 kHz,
2 ns, +40V,

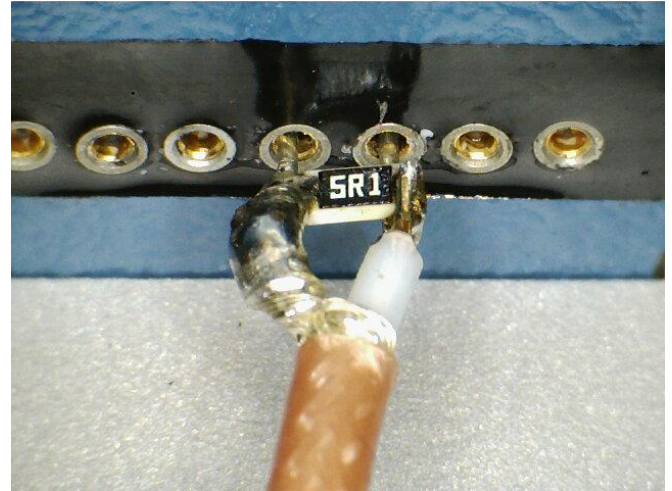
500 ps/div. 20 V/div (200 mV/div × 40 dB):

1 ns/div. 20 V/div (200 mV/div × 40 dB):





Test method: Short leads are soldered across a chip resistor. A coaxial cable is soldered across the resistor. The signal lead is inserted into the anode pin socket. The ground lead is inserted into one of the other pin sockets (which are grounded). The total effective resistor is $5 \Omega \parallel 50 \Omega (R_{SCOPE}) = 4.5 \Omega$.



Top waveform: Voltage across the parallel combination of the 4.5Ω effective resistance. It should be approximately $(+40V / 54.5\Omega) \times 4.5\Omega = +3.3V$ in amplitude, which agrees with the observed waveform.

Bottom waveform: "MI" output, approximately $+40V / 11$.

Both: 500 ps/div, 2 V/div ($200 \text{ mV/div} \times 20 \text{ dB}$).