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BOX 5120, LCD MERIVALE
OTTAWA, ONTARIO
CANADA K2C 3H5

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PERFORMANCE CHECKSHEET

Model: AVO-9A5-B-P-P1B-AC06
Type: Ultra-High-Speed Laser Diode Driver
S.N.: 13527
Date: December 15, 2016

Output Amplitude: up to +53V, to 50Ω
Pulse Width (FWHM): 1 - 10 ns
Rise Time (20%-80%): ≤ 500 ps
Fall Time (80%-20%): ≤ 1 ns
PRF: 1 Hz – 1 MHz
Jitter, Stability: OK
Prime Power: 100-240V AC, 50-60 Hz.

Basic specifications: →

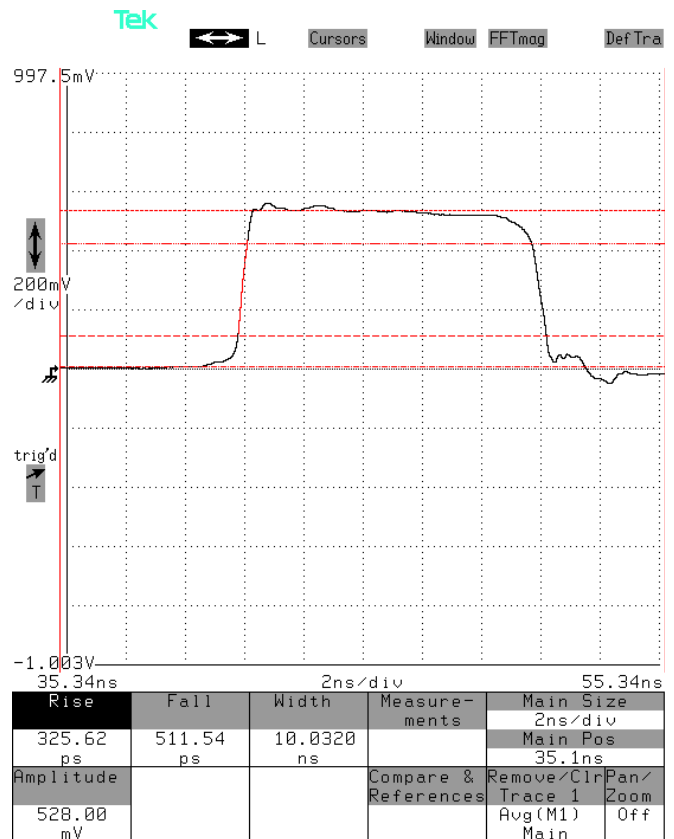
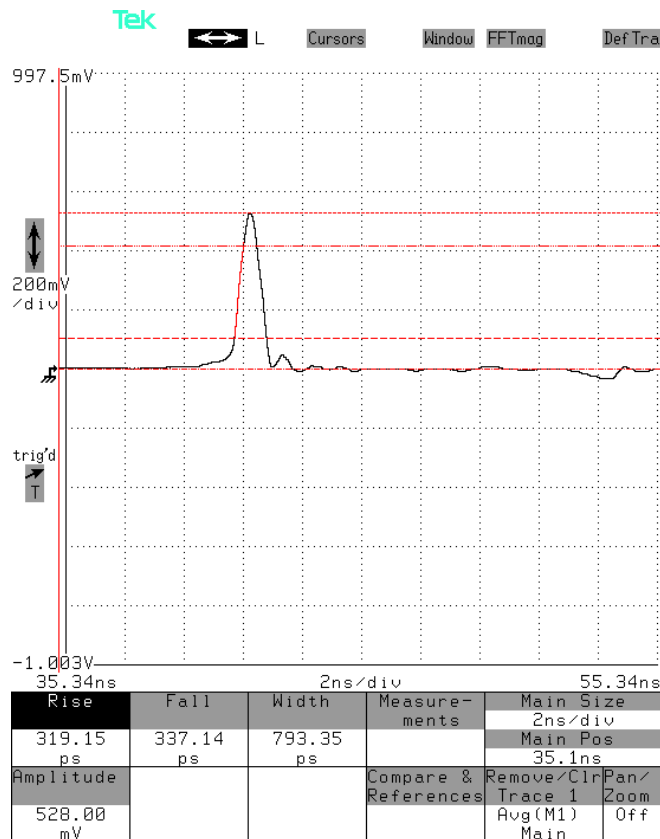
Test Waveforms

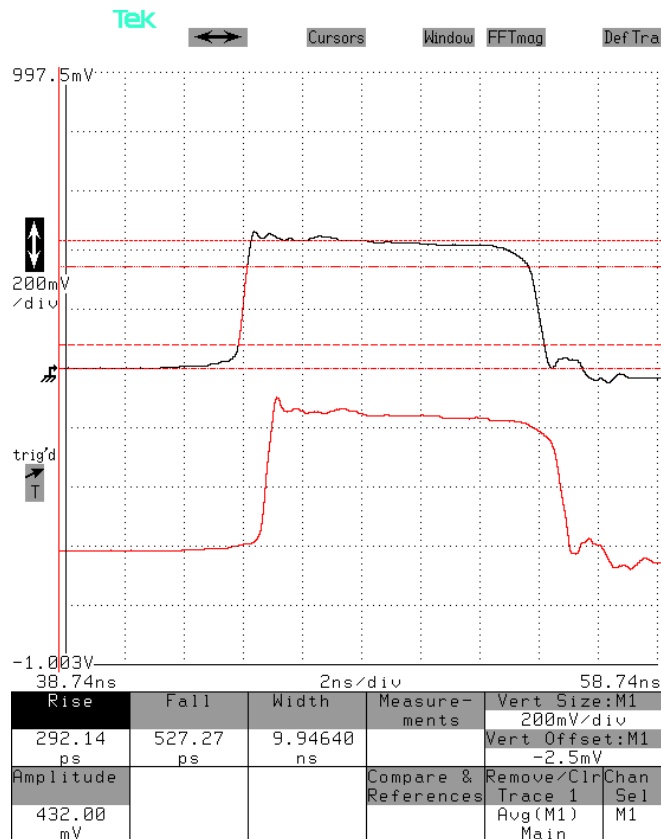
Mainframe output into 50 Ohm load at 100 kHz,
< 1 ns, +53V,

Mainframe output into 50 Ohm load at 100 kHz,
10 ns, +50V,

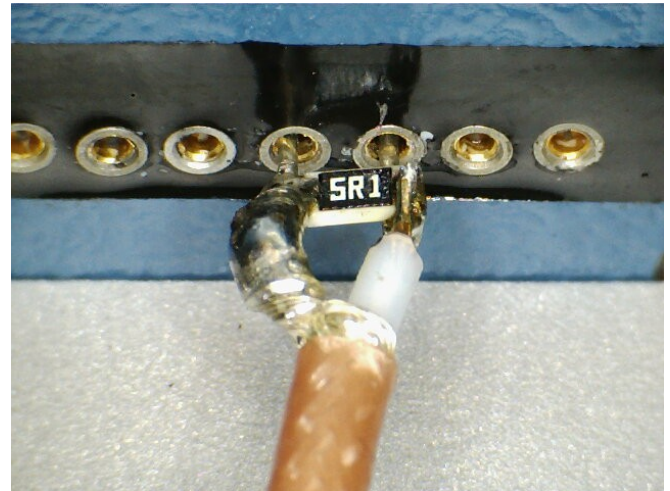
2 ns/div. 20 V/div (200 mV/div × 40 dB):

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





Test method: Short leads are soldered across two 10Ω chip resistors in parallel. 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 4.5 Ω effective resistance. It should be approximately $(+53V / 54.5\Omega) \times 4.5\Omega = +4.4V$ in amplitude, which agrees approximately with the observed waveform.

Bottom waveform: “M1” output, approximately $+53V / 11$.

Both: 2 ns/div, 2 V/div (200 mV/div × 20 dB).