AVTECH ELECTROSYSTEMS LTD.
NANOSECOND WAVEFORM ELECTRONICS
SINCE 1975

P.O. BOX 265
OGDENSBURG, NY
U.S.A. 13669-0265

TEL: 888-670-8729 (USA & Canada) or +1-613-686-6675 (Intl)
FAX: 800-561-1970 (USA & Canada) or +1-613-686-6679 (Intl)

info@avtechpulse.com - http://www.avtechpulse.com/

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

PERFORMANCE CHECKSHEET

Model: AVO-9RA-B-P0D-P-MS1A
Type: Ultra-High-Speed Laser Diode Driver
S.N.: 13579
Date: June 14, 2017

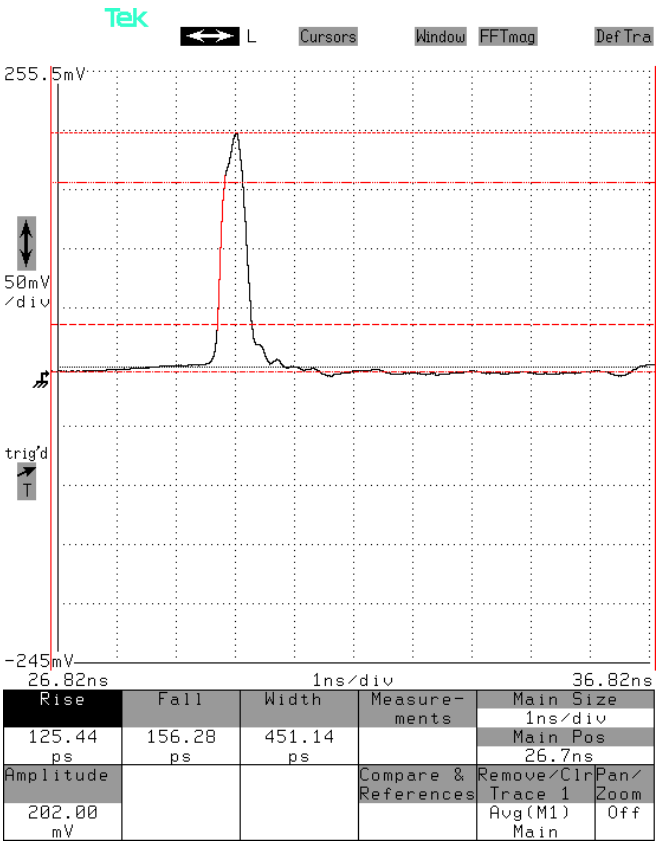
Basic specifications: →

Output Amplitude:	up to +20V, to 50Ω
Pulse Width (FWHM):	0.5 - 4 ns
Rise Time (20%-80%):	≤ 250 ps
Fall Time (80%-20%):	≤ 300 ps
PRF:	1 Hz – 10 MHz
Jitter, Stability:	OK
Prime Power:	100-240V AC, 50-60 Hz.

Test Waveforms

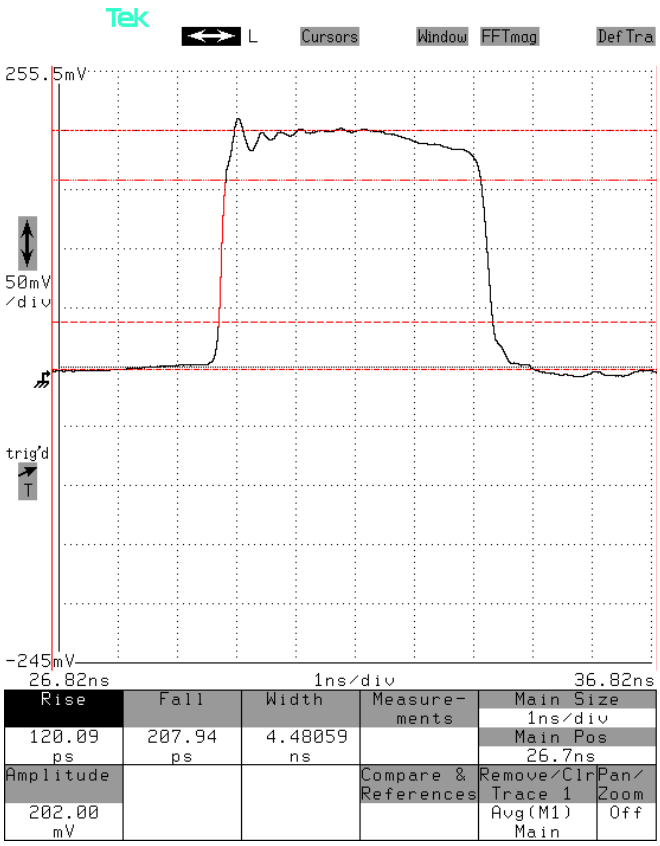
Mainframe output into 50 Ohm load at 100 kHz, < 0.5 ns, +20V,

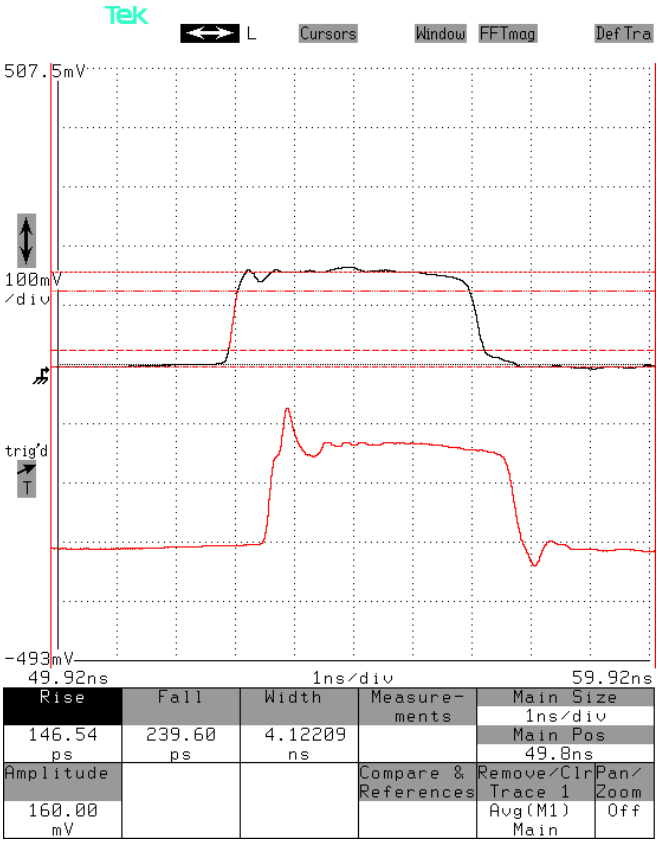
1 ns/div. 5 V/div (50 mV/div × 40 dB):



Mainframe output into 50 Ohm load at 100 kHz, > 4 ns, +20V,

1 ns/div. 5 V/div (50 mV/div × 40 dB):





Top waveform: Voltage across the parallel combination of the 4.5 Ω effective resistance. It should be approximately (+20V / 54.5Ω) × 4.5Ω = +1.65V in amplitude, which agrees approximately with the observed waveform.

Bottom waveform: “MI” output, approximately +20V / 11.

Both: 1 ns/div, 1V/div (100 mV/div × 20 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 Ω || 50 Ω (R_{SCOPE}) = 4.5 Ω.