

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

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

PERFORMANCE CHECKSHEET

Model: AVX-S1-INV-P1C-T1C Type: High-Bandwidth Output Module S.N.: 13092 Date: November 12, 2013

Rise Time and Anode/Cathode Continuity Check

Test method: Short leads are soldered to a 50Ω chip resistor. A coaxial cable is soldered across the resistor. The signal lead is inserted into the cathode pin socket. The grounded lead is inserted into the anode pin socket. The total effective resistor is 50 $\Omega \parallel$ 50 $\Omega (R_{SCOPE}) = 25 \Omega$.

The pulse source is the AVO-9A4-B-P1B-T1B-P S/N 13091 operating at +43V, 10 ns.





Bottom: "MI" output. 2V/div (200 mV/div × 20 dB). This shows that the pulse amplitude after the inverting transformer is $-3.1V \times 11 = -34V$, approximately. (There is ~21% loss in the transformer).

Top: Voltage measured across the resistor. It should be \approx (-34V × 25 Ω / 50 Ω) = -17V, which agrees with the observed waveform. 10V/div (= 100 mV/div × 40 dB), 2 ns/div.