



# AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS  
SINCE 1975

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## PERFORMANCE CHECKSHEET

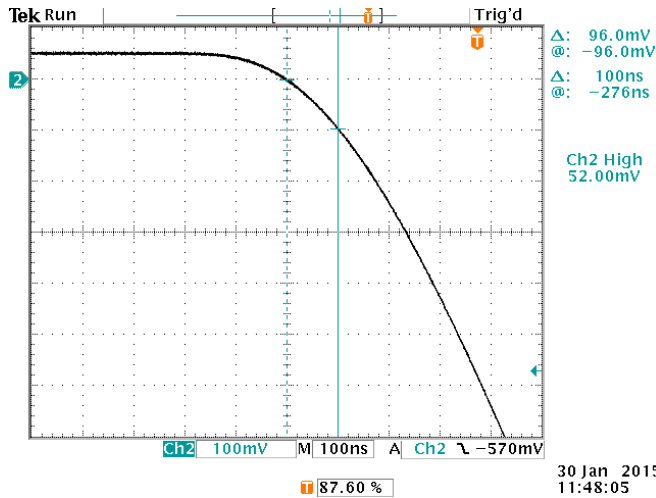
Model: AVR-CD2-B-MS1  
Type: Semiconductor Device Tester  
S.N.: 13246  
Date: January 30, 2015

Output Amplitude: +0.8 to +40 A  
Pulse Width (FWHM): 5 us nominal  
Switching Time,  
+ to -: < 70 to > 200 A/us  
PRF: 1 - 10 Hz  
Jitter, Stability: OK  
Prime Power: 100-240V AC, 50-60 Hz.

Basic specifications: →

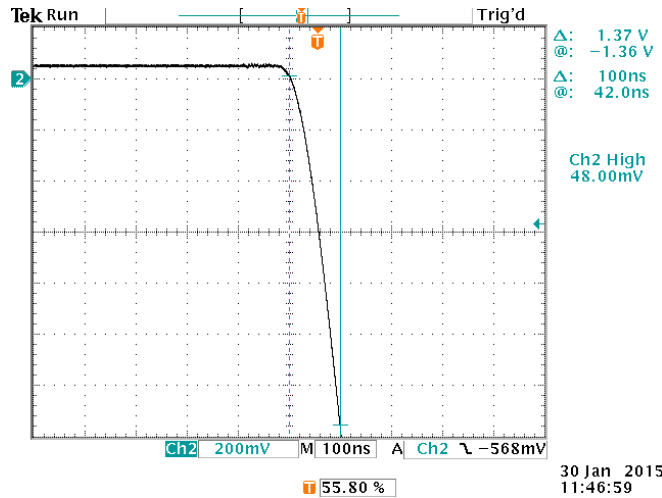
### Test Waveforms

+1A, -50V, minimum slew rate, 0Ω DUT,



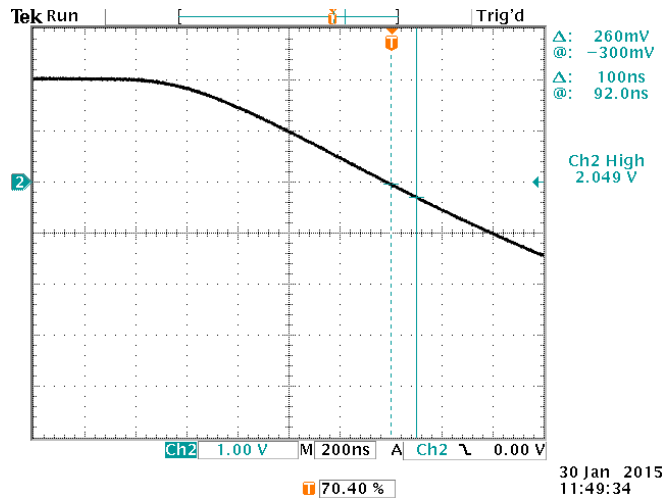
$$dl/dt = 96 \text{ mV} \div 50 \text{ mV/A} \div 100 \text{ ns} = 19.2 \text{ A/us}$$

+1A, -50V, maximum slew rate, 0Ω DUT,



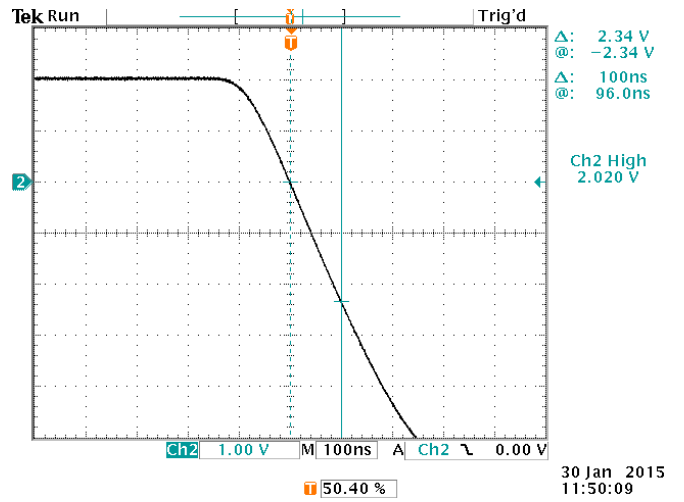
$$dl/dt = 1.37 \text{ V} \div 50 \text{ mV/A} \div 100 \text{ ns} = 274 \text{ A/us}$$

+40A, -50V, minimum slew rate, 0Ω DUT,



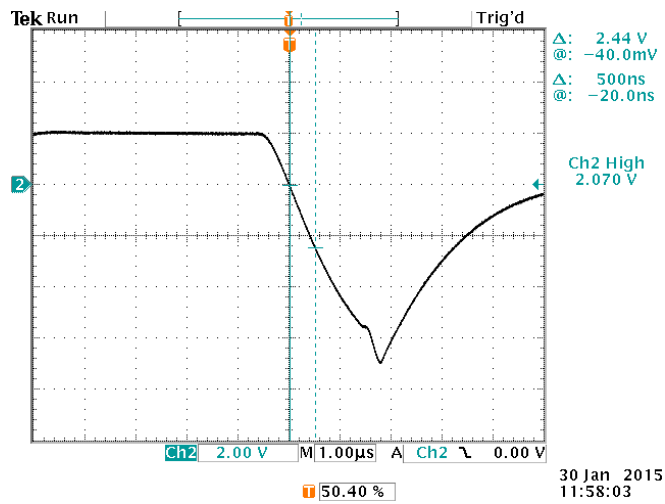
$$dI/dt = 260 \text{ mV} \div 50 \text{ mV/A} \div 100 \text{ ns} = 52 \text{ A/us}$$

+40A, -50V, maximum slew rate, 0Ω DUT,



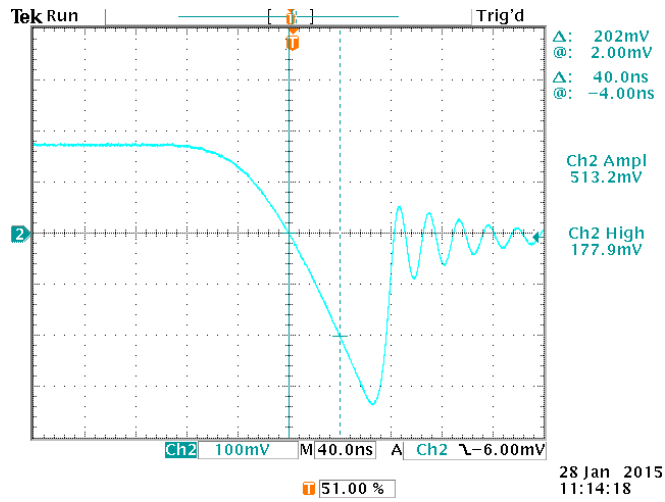
$$dI/dt = 2.34 \text{ V} \div 50 \text{ mV/A} \div 100 \text{ ns} = 468 \text{ A/us}$$

+40A, -50V, 100 A/us slew rate, 0Ω DUT,



$$dI/dt = 2.44 \text{ V} \div 50 \text{ mV/A} \div 500 \text{ ns} = 97.6 \text{ A/us}$$

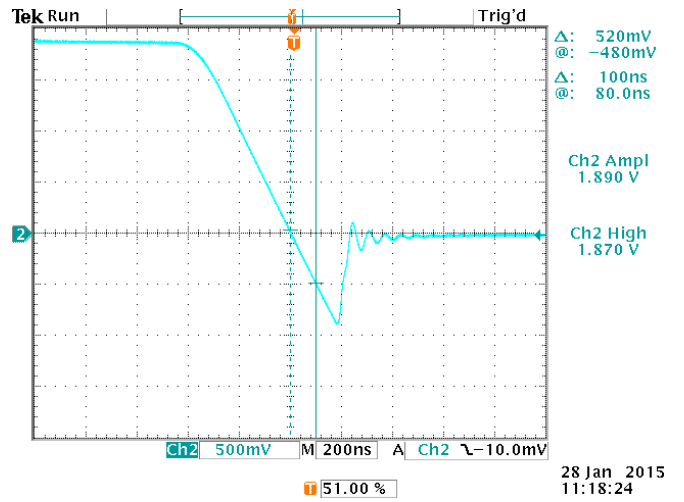
+3.5A, -50V, 2N6782,



$$di/dt = 202 \text{ mV} \div 50 \text{ mV/A} \div 40 \text{ ns} = 101 \text{ A/us}$$

$$t_{RR} \approx 80 \text{ ns}$$

+38A, -50V, 2N6764,



$$di/dt = 520 \text{ mV} \div 50 \text{ mV/A} \div 100 \text{ ns} = 104 \text{ A/us}$$

$$t_{RR} \approx 230 \text{ ns}$$