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PERFORMANCE CHECKSHEET

Model: AVR-CC2-B-MSB  
Type: Semiconductor Device Tester  
S.N.: 13139  
Date: April 4, 2014

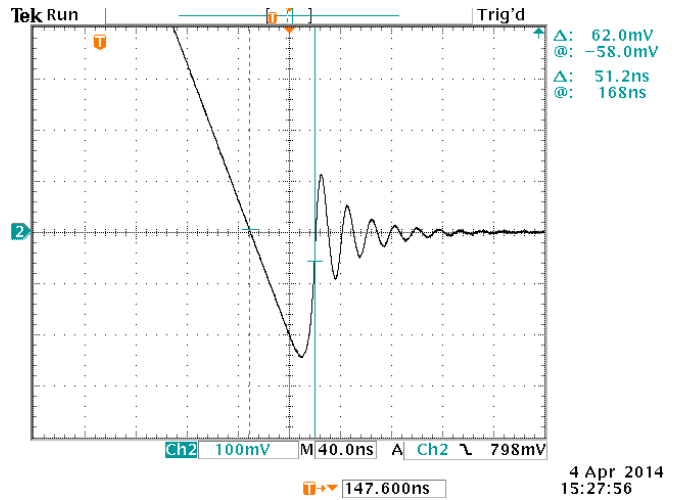
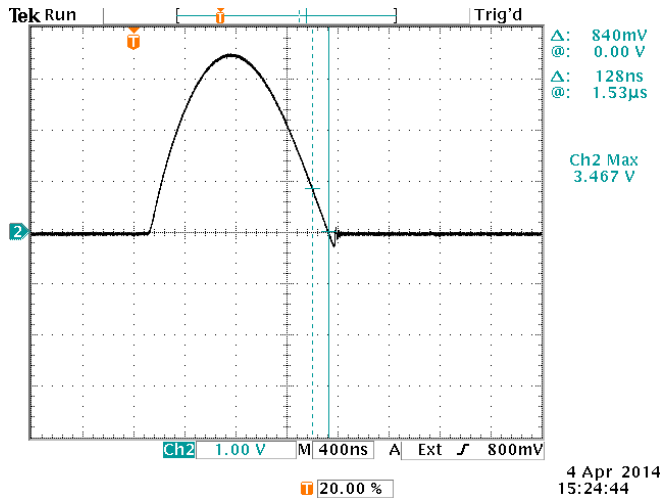
Output Amplitude: +15 to +150V  
Pulse Width (FWHM): 2.5 us  
Max. forward current: +80 A  
Max. reverse current: -40 A  
PRF: 1 - 10 Hz  
Jitter, Stability: OK  
Prime Power: 100-240V AC, 50-60 Hz.

Basic specifications: →

Test Waveforms

1N6306 in AVX-CC2-MS1 jig, HV = +110V,  
400 ns/div, 20 A/div (= 1 V/div ÷ 50 mV/A)

Same waveform, scaled to show t<sub>RR</sub>:  
40 ns/div, 2 A/div (= 100 mV/div ÷ 50 mV/A)



$$di/dt = (840 \text{ mV} \div 50 \text{ mV/A}) / 0.128 \text{ us} = 131.25 \text{ A/us}$$

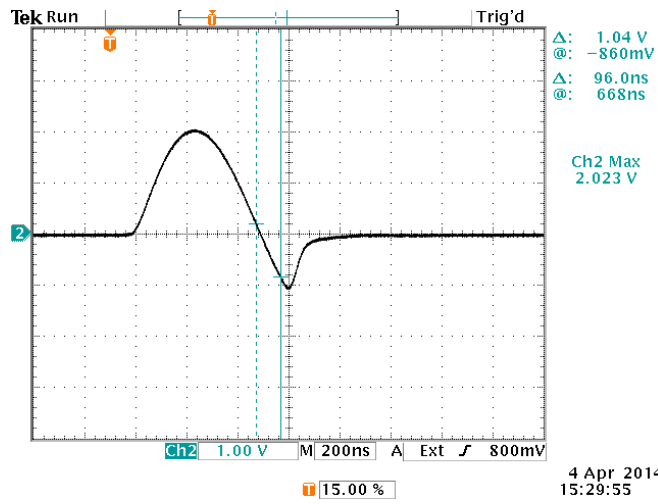
$$t_{RR} = 51.2 \text{ ns.}$$

$$I_{FM} = 3.467\text{V} \div 50 \text{ mV/A} = 69.34 \text{ A}$$

MIL-PRF-19500/550C specified a maximum t<sub>RR</sub> of 60 ns under these conditions.

“MSC 1231 D0851GM” in AVX-CC2-MS2 jig,  
 HV = +110V,

200 ns/div, 20 A/div (= 1 V/div ÷ 50 mV/A)



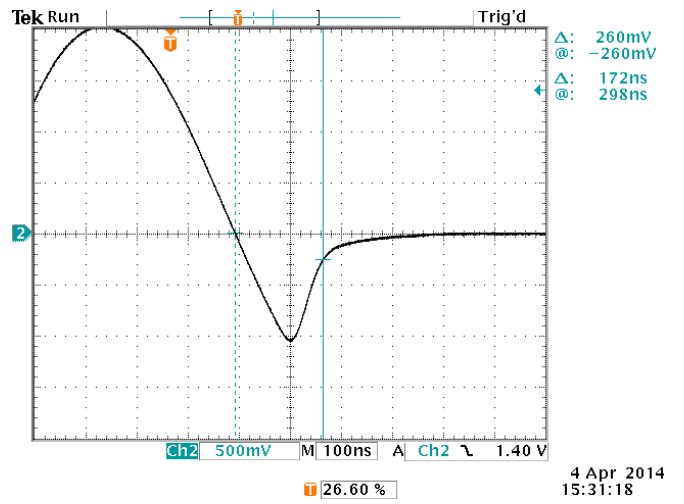
$$dI/dt = (1.04V \div 50 \text{ mV/A}) / 0.096 \text{ us}$$

$$= 216.7 \text{ A/us}$$

$$I_{FM} = 2.023V \div 50 \text{ mV/A} = 40.46 \text{ A}$$

Same waveform, scaled to show t<sub>RR</sub>:

100 ns/div, 10 A/div (= 500 mV/div ÷ 50 mV/A)



$$t_{RR} = 172 \text{ ns}$$