AVTECH
A V T E C H   E L E C T R O S Y S T E M S   L T D .
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SINCE 1975

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PERFORMANCE CHECKSHEET

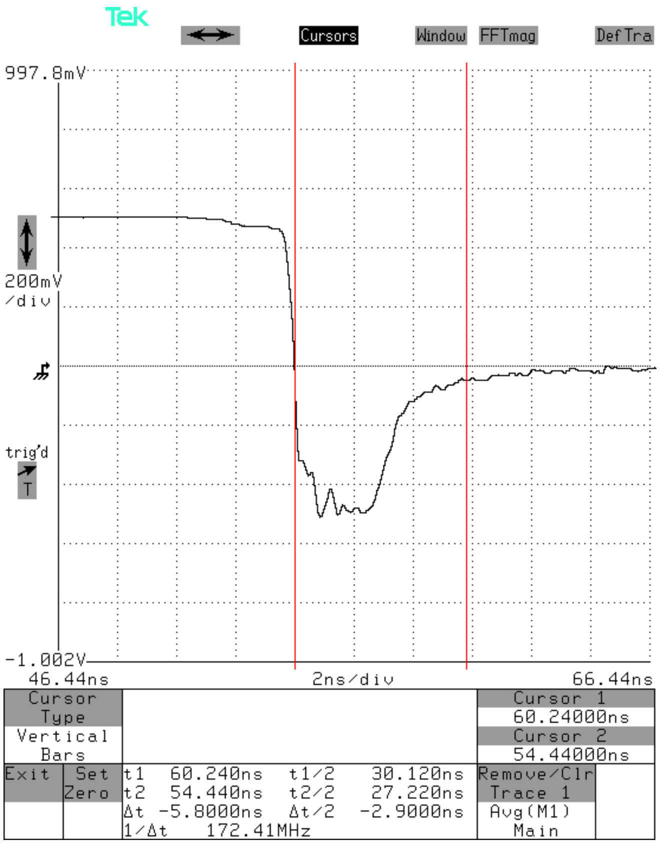
Model:	AVR-EB2A-B
Type:	Semiconductor Device Tester
S.N.:	12420
Date:	April 21, 2010

Basic specifications: →

Output Amplitude:	to +100 mA, -100 mA
Pulse Width (FWHM):	200 ns
Switching Time, + to -, 10%-90%:	≤ 300 ps (at mainframe)
PRF:	1 - 10 kHz
Jitter, Stability:	OK
Prime Power:	100-240V AC, 50-60 Hz.

Test Waveforms

With a 1N4148 installed in the AVX-CA-AR1 test jig, 40 mA/div, 2 ns/div:

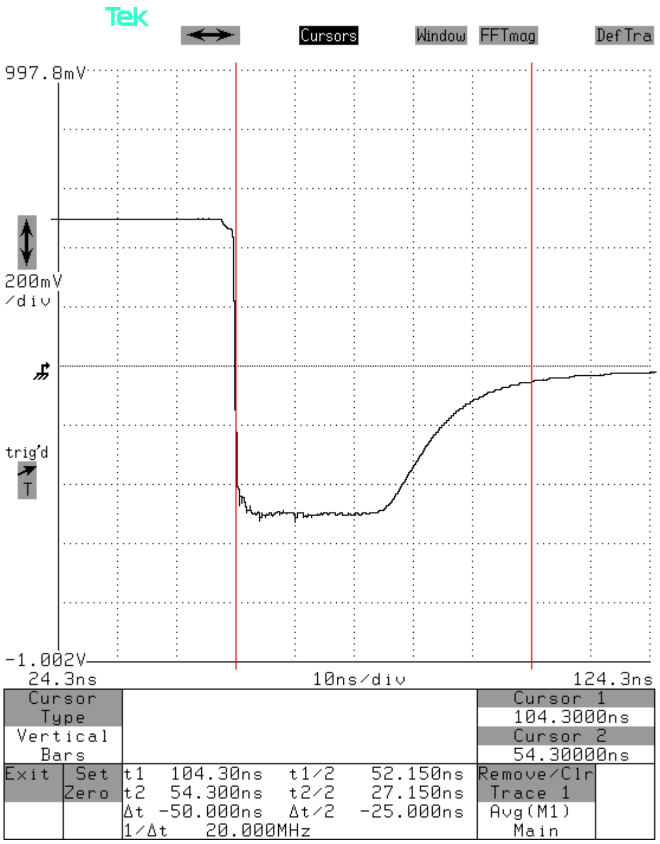


```
Cursor Type      Cursor 1  60.24000ns
Vertical Bars    Cursor 2  54.44000ns
Exit  Set Zero   t1  60.240ns   t1/2  30.120ns    Remove/Clr Trace 1
                 t2  54.440ns   t2/2  27.220ns
                 Δt  -5.8000ns  Δt/2  -2.9000ns   Avg(M1) Main
                 1/Δt  172.41MHz
```

I_F = +100 mA, I_R = - 100 mA

Measured t_{RR} = 5.8 ns.

With a 1N5811US installed in the AVX-CA-AR1 test jig, 40 mA/div, 10 ns/div:

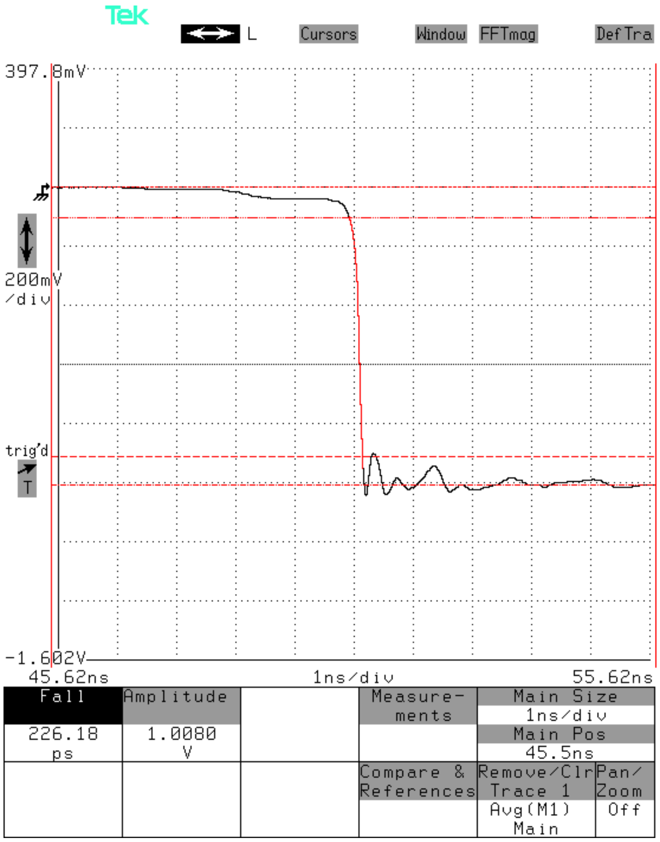


```
Cursor Type      Cursor 1  104.3000ns
Vertical Bars    Cursor 2  54.30000ns
Exit  Set Zero   t1  104.30ns   t1/2  52.150ns    Remove/Clr Trace 1
                 t2  54.300ns   t2/2  27.150ns
                 Δt  -50.000ns  Δt/2  -25.000ns   Avg(M1) Main
                 1/Δt  20.000MHz
```

I_F = +100 mA, I_R = - 100 mA

Measured t_{RR} = 50 ns.

Pulse output directly from mainframe, with the test jig bypassed (2 V/div, 2 ns/div):



Fall: 226.18 ps
Amplitude: 1.0080 V
Main Size: 1ns/div
Main Pos: 45.5ns

Shows a 10%-90% transition time of 226 ps.

For more sample waveforms, please see the “Typical Results” section of the manual.