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BOX 5120, LCD MERIVALE  
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CANADA K2C 3H4

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SUPPLEMENTARY PERFORMANCE CHECKSHEET

Model: AVN-3-C-P-PN-AT  
Type: Ultra-High-Speed Pulse Generator  
S.N.: 12163  
Date: February 26, 2009

Max. Output Amplitude: varies with PRF, 5-15V  
Pulse Width (FWHM): 0.3 - 1 ns  
Rise Time (20%-80%): ≤ 150 ps  
Fall Time (80%-20%): ≤ 150 ps  
PRF: 25 - 250 MHz  
Jitter, Stability: OK  
Prime Power: 100-240V AC, 50-60 Hz.

Basic specifications: →

Test Waveforms

At 25 MHz, ≥ +15V, 300 ps,

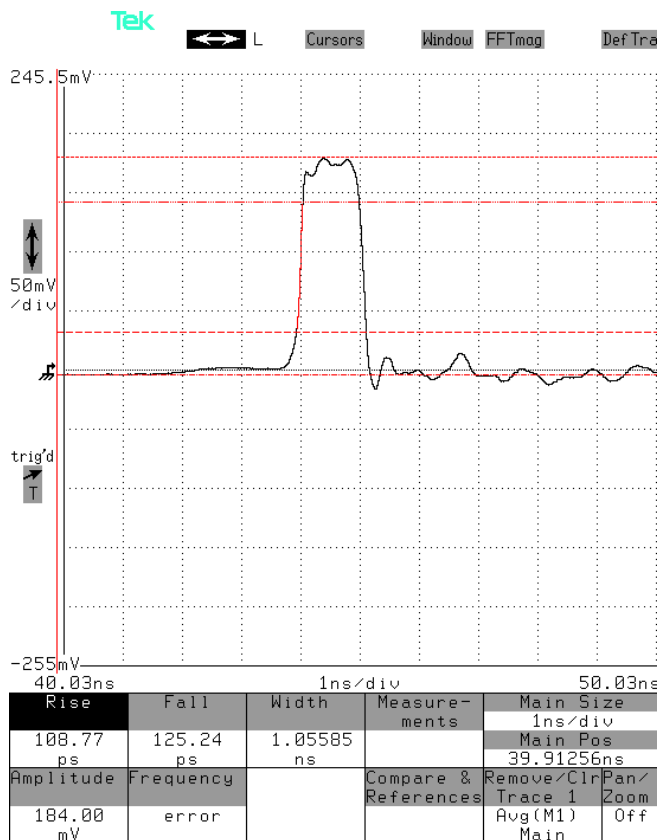
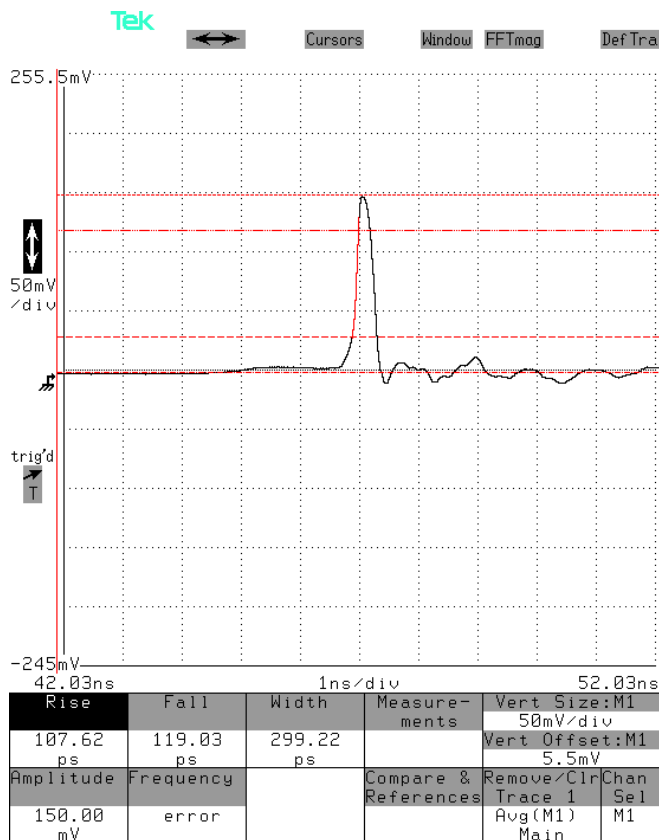
At 25 MHz, ≥ +15V, 1 ns,

AMP dial = 10.00  
TR dial = 3.43  
TF dial = 6.90

AMP dial = 10.00  
TR dial = 4.36  
TF dial = 10.00

1 ns/div. 5 V/div (50 mV × 40 dB):

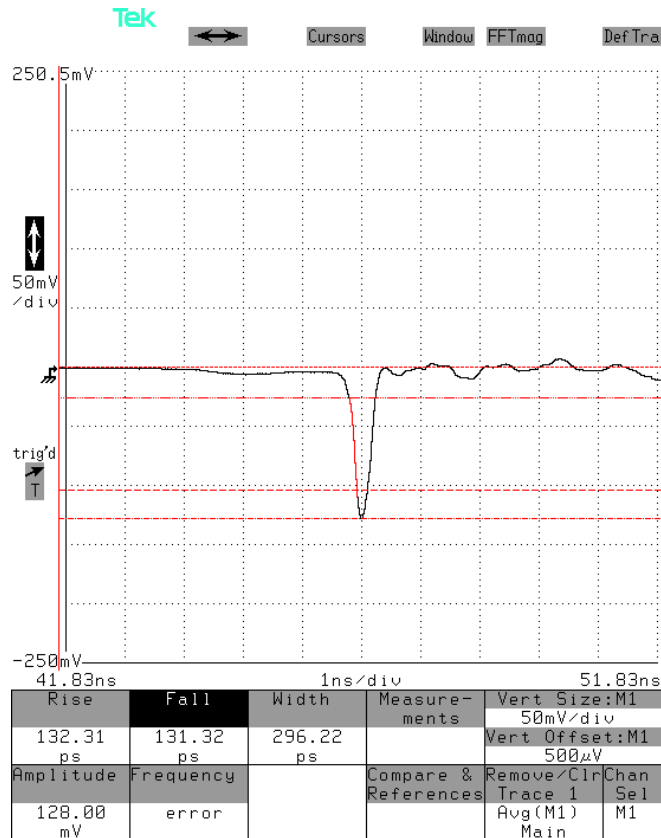
1 ns/div. 5 V/div (50 mV × 40 dB):



At 25 MHz, near -15V, 300 ps,

AMP dial = 10.00  
 TR dial = 2.43  
 TF dial = 8.15

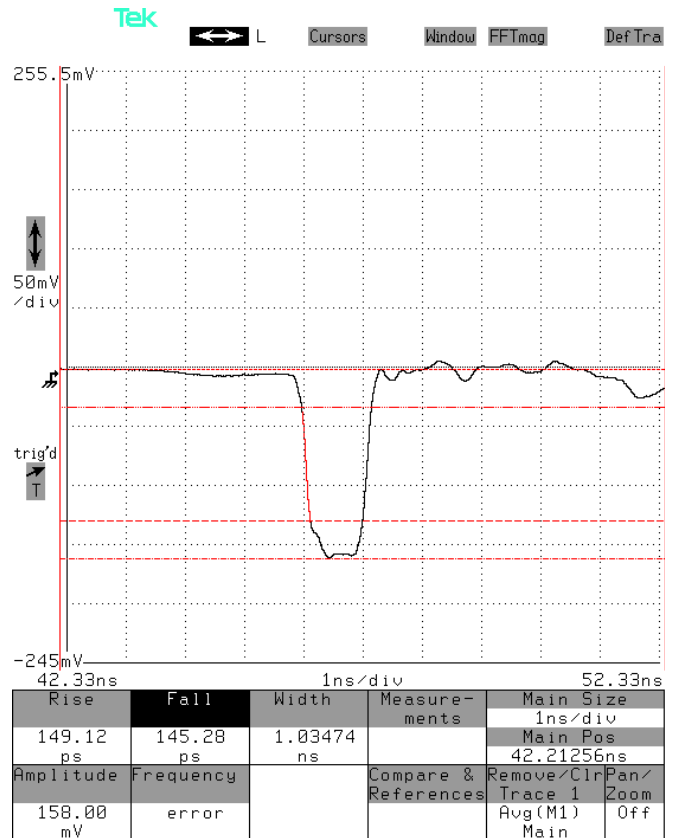
1 ns/div. 5 V/div (50 mV × 40 dB):



At 25 MHz, ≥ -15V, 1 ns,

AMP dial = 10.00  
 TR dial = 4.06  
 TF dial = 10.00

1 ns/div. 5 V/div (50 mV × 40 dB):



The inverting transformer degrades the maximum amplitude to approximately -13V under these conditions, instead of the specified -15V. This is unavoidable, unfortunately.

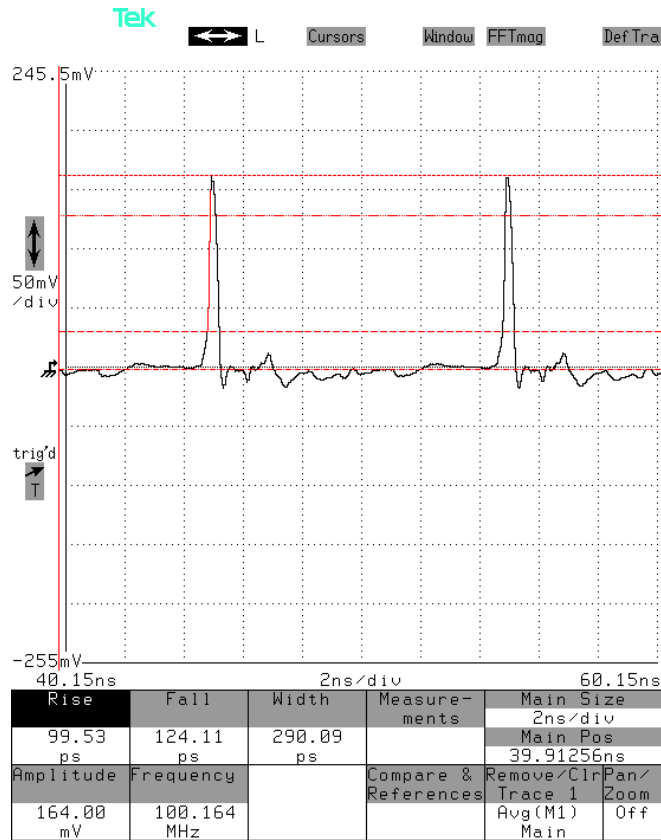
At 100 MHz,  $\geq +15V$ , 300 ps,

AMP dial = 10.00

TR dial = 6.84

TF dial = 3.06

2 ns/div. 5 V/div (50 mV  $\times$  40 dB):



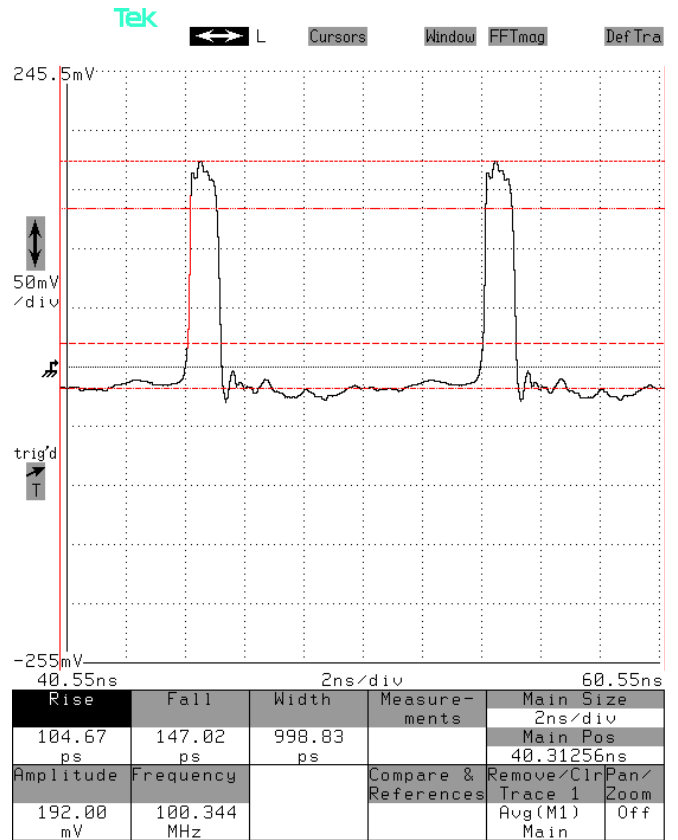
At 100 MHz,  $\geq +15V$ , 1 ns,

AMP dial = 10.00

TR dial = 8.90

TF dial = 6.49

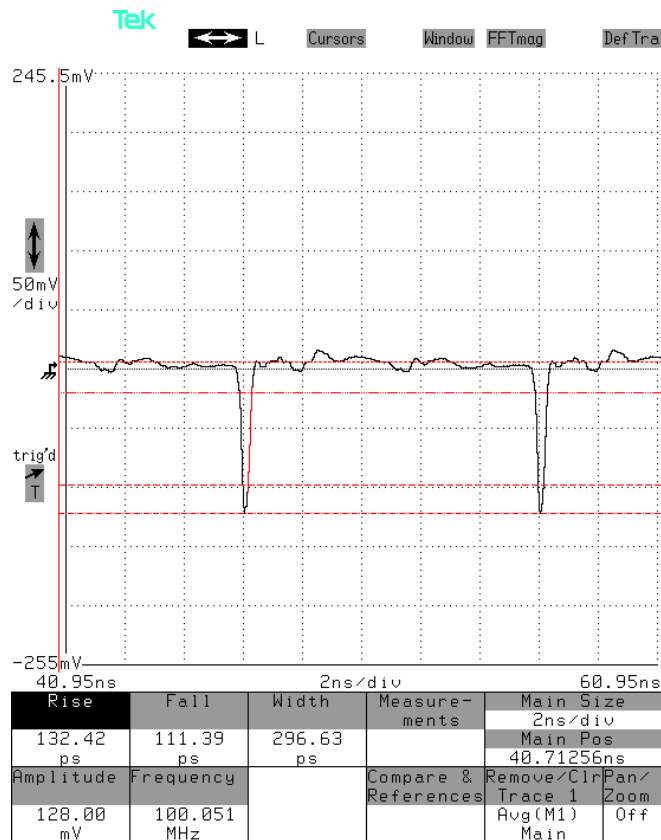
2 ns/div. 5 V/div (50 mV  $\times$  40 dB):



At 100 MHz,  $\geq -15V$ , 300 ps,

AMP dial = 10.00  
 TR dial = 6.84  
 TF dial = 3.06

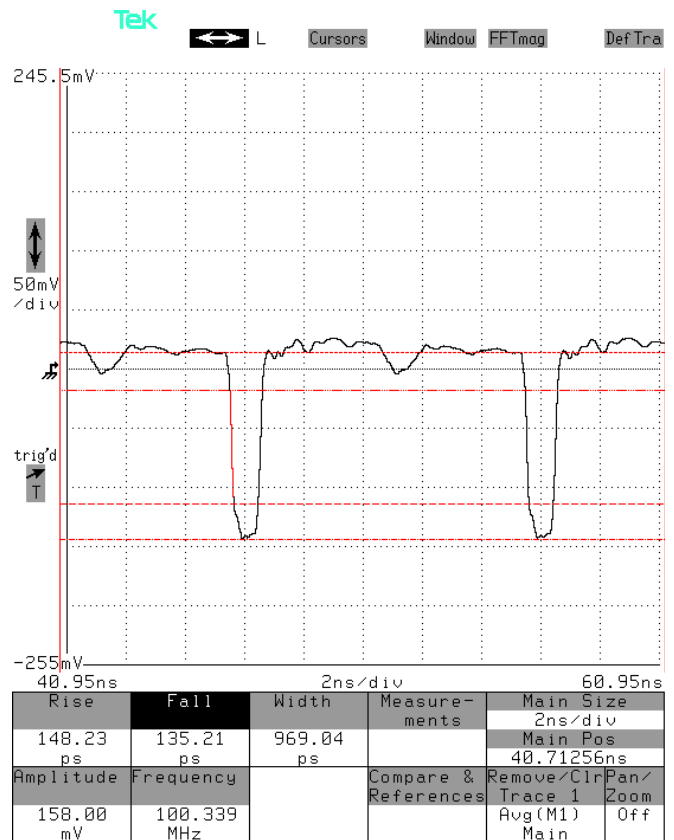
2 ns/div. 5 V/div (50 mV  $\times$  40 dB):



At 100 MHz,  $\geq -15V$ , 1 ns,

AMP dial = 10.00  
 TR dial = 8.90  
 TF dial = 6.49

2 ns/div. 5 V/div (50 mV  $\times$  40 dB):



The inverting transformer degrades the maximum amplitude to approximately -13V under these conditions, instead of the specified -15V. This is unavoidable, unfortunately.

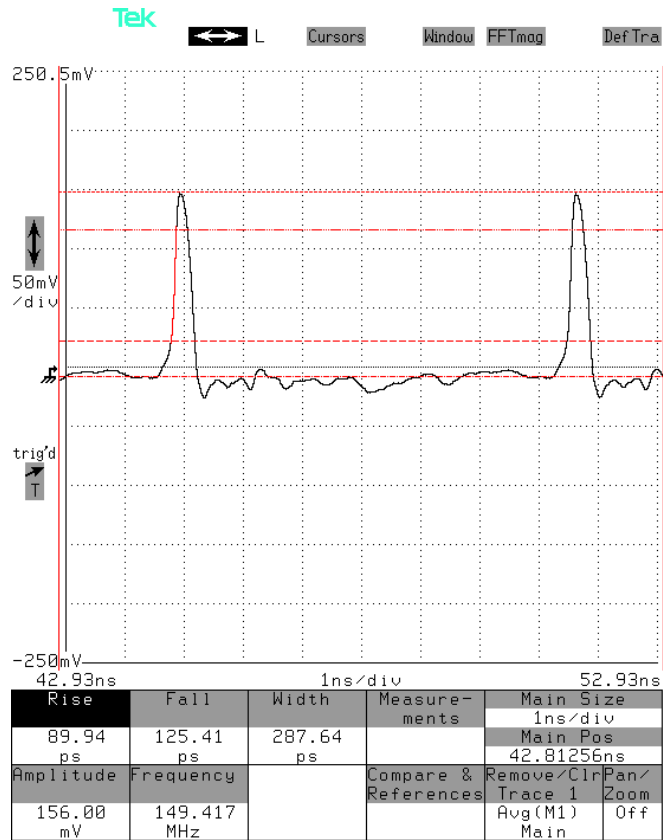
At 150 MHz,  $\geq +10V$ , 300 ps,

AMP dial = 10.00

TR dial = 3.22

TF dial = 2.42

1 ns/div. 5 V/div (50 mV  $\times$  40 dB):



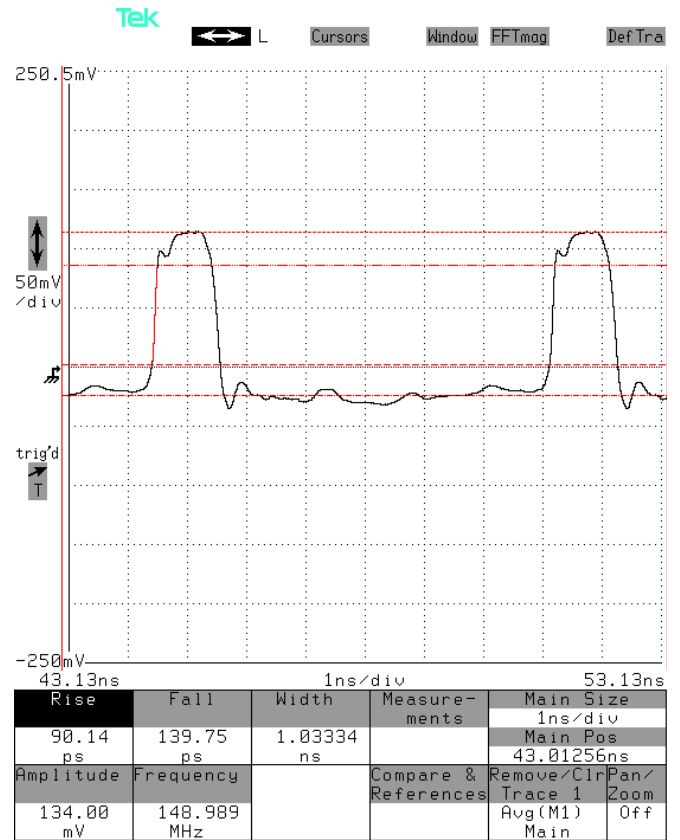
At 150 MHz,  $\geq +10V$ , 1 ns,

AMP dial = 10.00

TR dial = 9.36

TF dial = 8.58

1 ns/div. 5 V/div (50 mV  $\times$  40 dB):



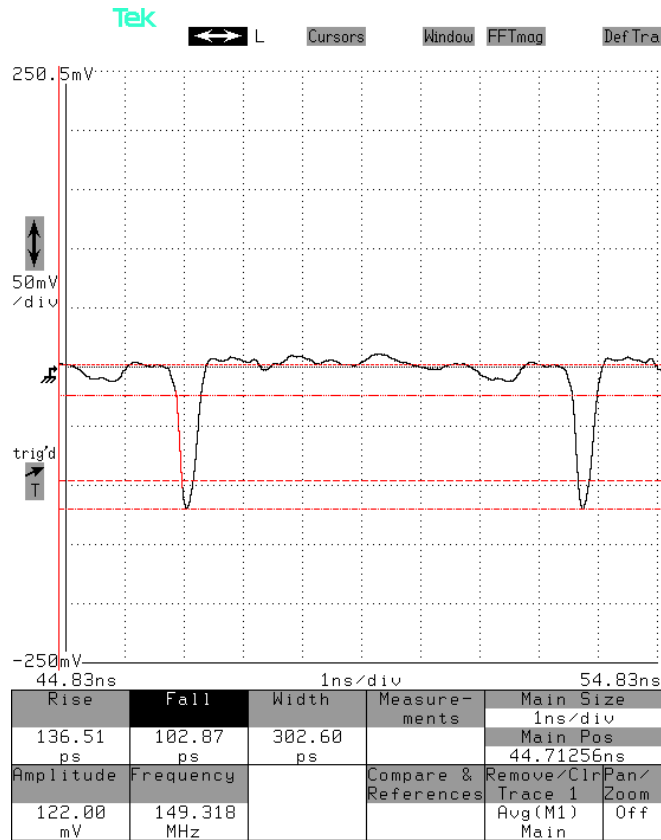
At 150 MHz,  $\geq -10V$ , 300 ps,

AMP dial = 10.00

TR dial = 3.22

TF dial = 2.66

1 ns/div. 5 V/div (50 mV  $\times$  40 dB):



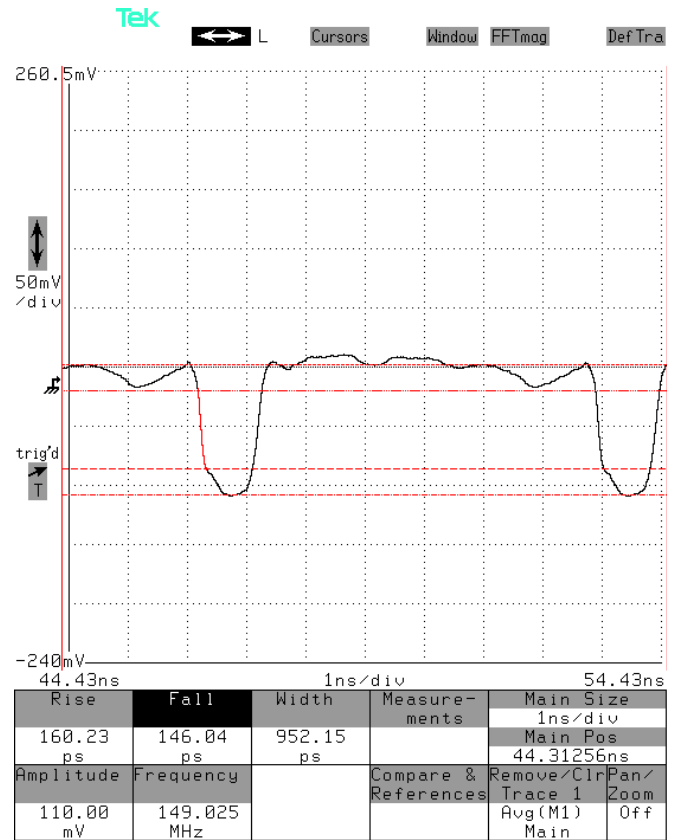
At 150 MHz,  $\geq -10V$ , 1 ns,

AMP dial = 9.97

TR dial = 8.15

TF dial = 6.11

1 ns/div. 5 V/div (50 mV  $\times$  40 dB):



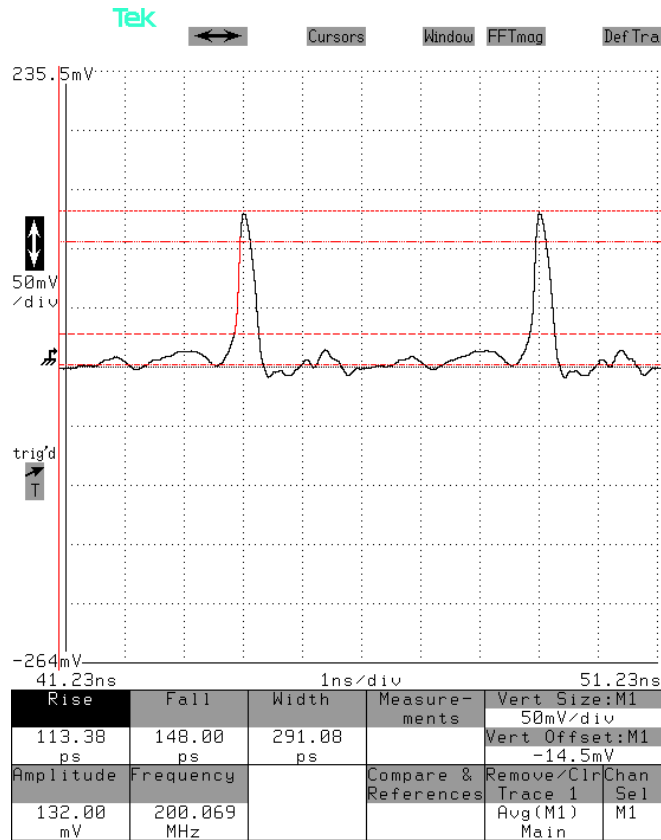
At 200 MHz,  $\geq +5V^*$ , 300 ps,

AMP dial = 9.93

TR dial = 8.56

TF dial = 2.21

1 ns/div. 5 V/div (50 mV  $\times$  40 dB):



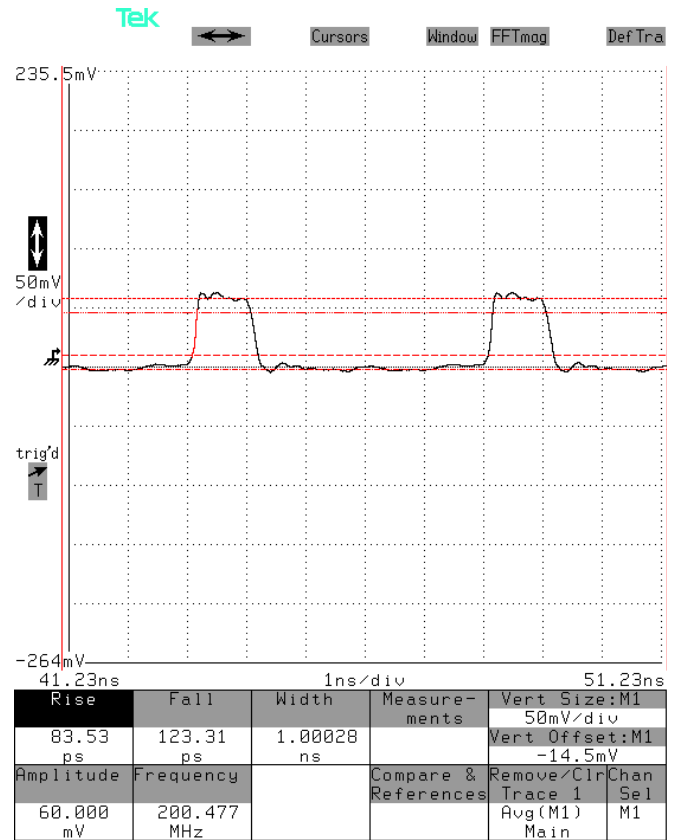
At 200 MHz,  $\geq +5V$ , 1 ns,

AMP dial = 4.84

TR dial = 10.00

TF dial = 5.28

1 ns/div. 5 V/div (50 mV  $\times$  40 dB):



\* Note: the maximum specified amplitude at 200 MHz is  $> 5V$ , not  $> 10V$ .

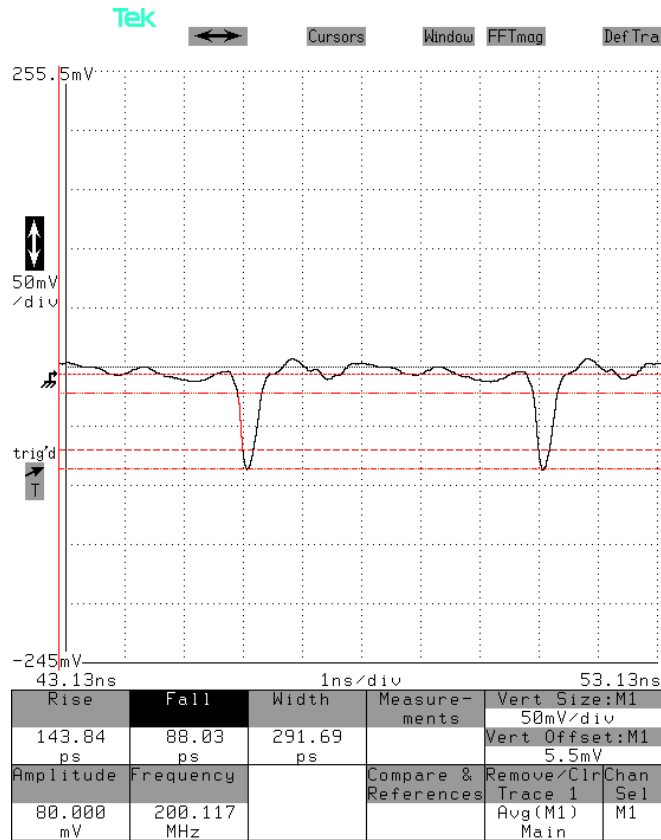
At 200 MHz,  $\geq -5V$ , 300 ps,

AMP dial = 9.45

TR dial = 8.43

TF dial = 2.66

1 ns/div. 5 V/div (50 mV  $\times$  40 dB):



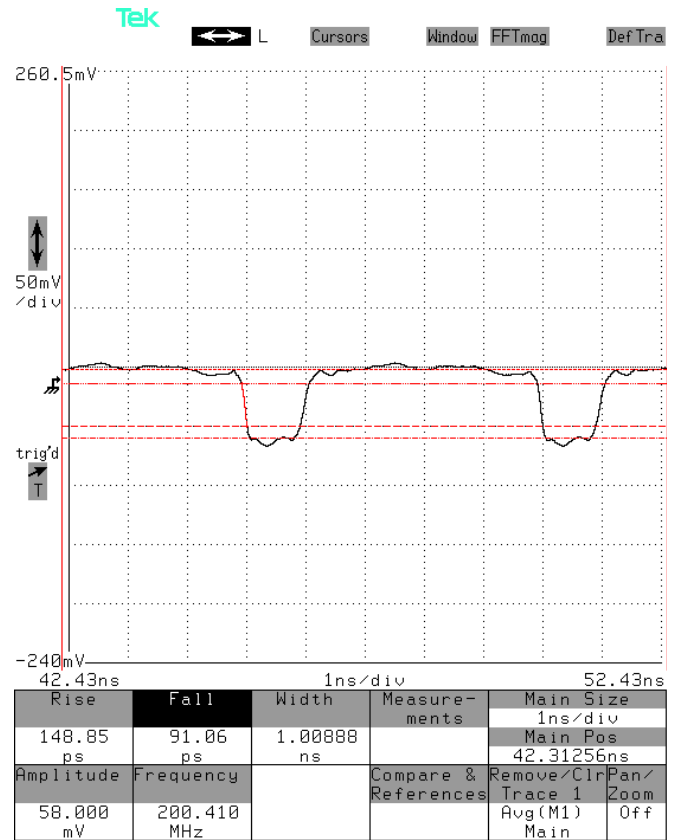
At 200 MHz,  $\geq -5V$ , 1 ns,

AMP dial = 10.00

TR dial = 6.00

TF dial = 5.31

1 ns/div. 5 V/div (50 mV  $\times$  40 dB):





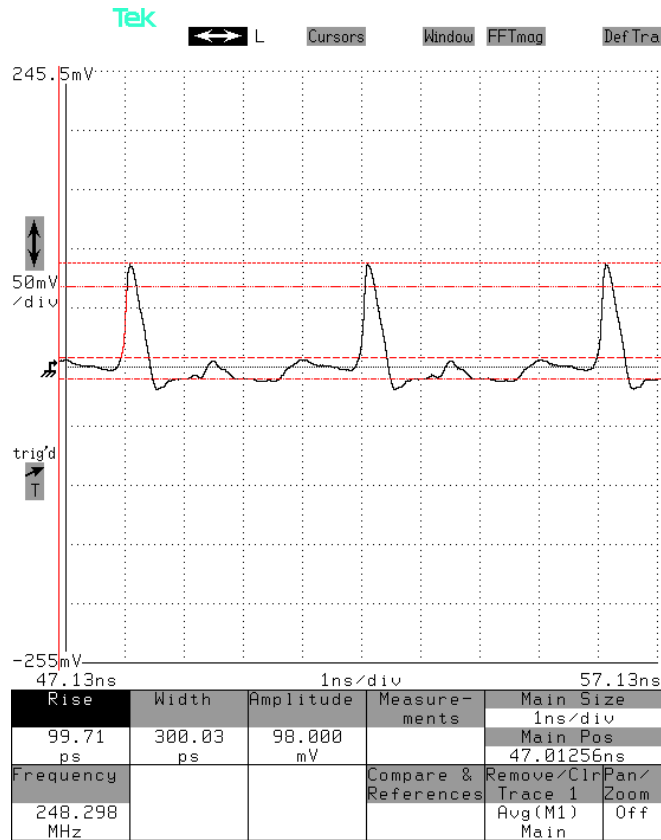
At 250 MHz,  $\geq +5V$ , 300 ps,

AMP dial = 10.00

TR dial = 9.06

TF dial = 4.98

1 ns/div. 5 V/div (50 mV  $\times$  40 dB):



At 250 MHz,  $\geq +5V$ , 500 ps,

AMP dial = 10.00

TR dial = 10.00

TF dial = 4.95

1 ns/div. 5 V/div (50 mV  $\times$  40 dB):



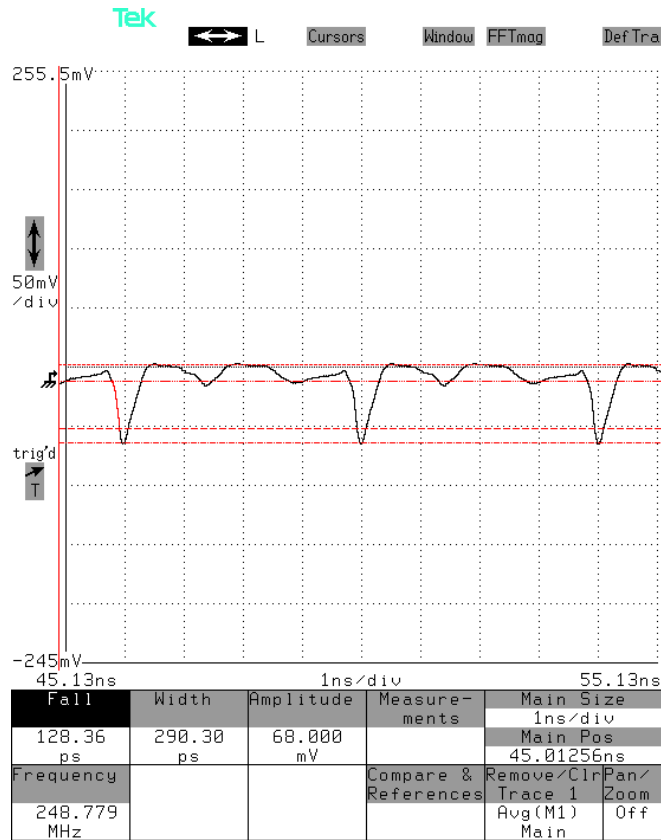
At 250 MHz,  $\geq -5V$ , 300 ps,

AMP dial = 10.00

TR dial = 8.84

TF dial = 3.80

1 ns/div. 5 V/div (50 mV  $\times$  40 dB):



At 250 MHz,  $\geq -5V$ , 500 ps,

AMP dial = 10.00

TR dial = 10.00

TF dial = 4.64

1 ns/div. 5 V/div (50 mV  $\times$  40 dB):

