

PULSE GENERATOR  
PERFORMANCE CHECK

Model: *AVO-5A-B-T*  
S.N.: *9727*  
Date: *APRIL 6 2001*

- a) Output signal amplitude:  
*0 TO +30V TO 0.75Ω*
- b) Pulse width:  
*(0 TO +40 AMP)*  
*20 TO 200NS*
- c) Rise time:  
*< 10 NS*
- d) Fall time:  
*< 10 N*
- e) PRF:  
*0 TO 5 KHz*
- f) Jitter, stability:  
*OK*
- g) Prime power:  
*120/240V*  
*50-60Hz*



(A)

9727

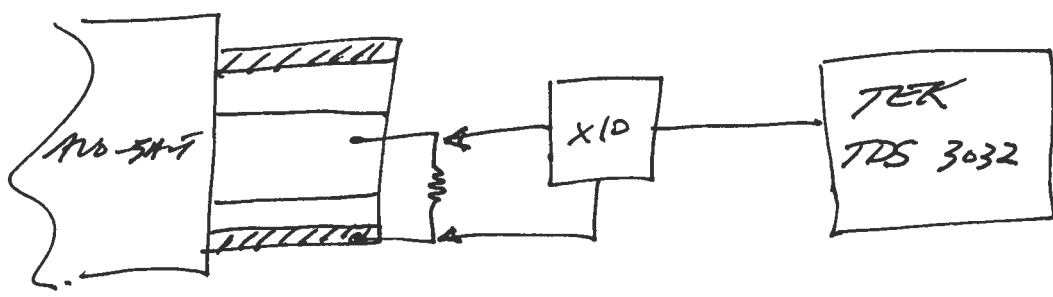
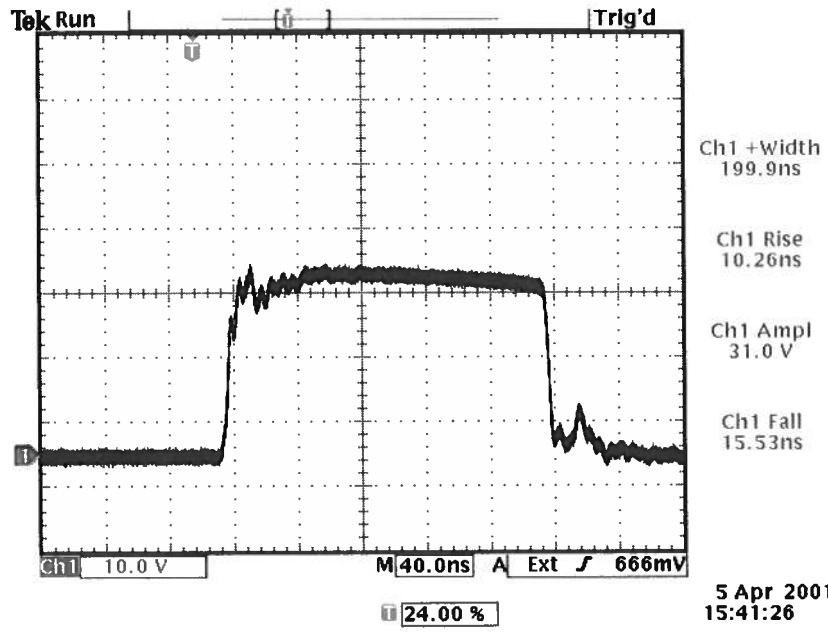
$R_L = 0.75 \Omega$

LOAD VOLTAGE

100A AMP

100ns PW

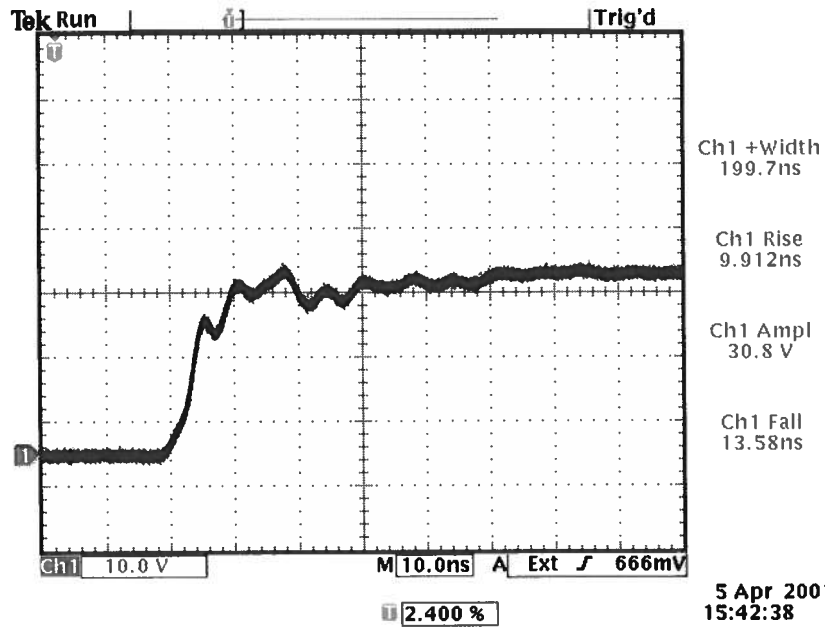
100A PWF



(B)

9727

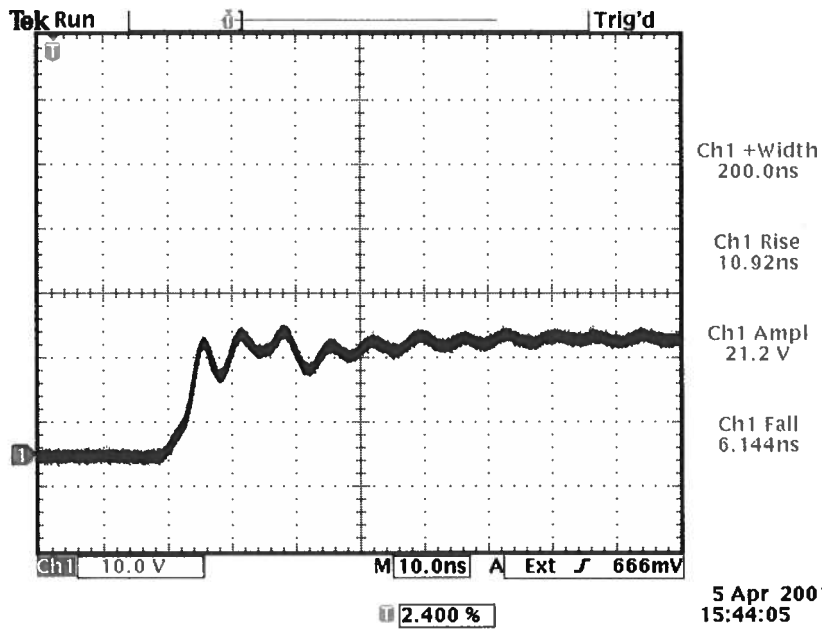
AS (A) BUT 10 NS/DIV  
LEADING EDGE



③

9727

AS ② BUT AMPLITUDE  
REDUCED BY  $\approx \frac{1}{3}$





# AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS  
SINCE 1975

P. O. BOX 265  
OGDENSBURG, NY  
U.S.A. 13669-0265  
TEL: (315) 472-5270  
FAX: (613) 226-2802

TEL: 1-800-265-6681  
FAX: 1-800-561-1970

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

P.O. BOX 5120 STN. F  
OTTAWA, ONTARIO  
CANADA K2C 3H4  
TEL: (613) 226-5772  
FAX: (613) 226-2802

## "-B" Functional Test & Calibration Certificate

Date of test:	April 5, 2001				Tester:	MJC
Programmed model name:	AVO-5A-B-P					
Programmed serial number:	9727					
Firmware revision:	2.24					
Internal trigger checked at:	1 Hz	10 Hz	100 Hz	1 kHz	5 kHz	
Actual measured output <sup>1</sup> :	1.003 Hz	10.02 Hz	100.1 Hz	1.003 kHz	5.007 kHz	
External trigger checked:	yes			Gate checked:	yes	
Manual trigger checked:	yes					
Pulse compression checked:	yes	Low Amplitude PW Distortion Nulled:			N/A	
Pulse width checked at:	20 ns	50 ns	100 ns	200 ns	100 Hz, 30V,	
Actual measured output <sup>2</sup> :	19.9 ns	49.3 ns	99.8 ns	199 ns	0.73 Ohm	
PWin = PWout mode checked:	N/A			DC mode checked:	N/A	
Duty Cycle Limit:	N/A					
Delay nulled:	yes					
Delay checked at:	100 ns	200 ns	500 ns	100 Hz, 30V,		
Actual measured output <sup>1</sup> :	100.2 ns	200.2 ns	504 ns	0.73 Ohm		
Double pulse checked:	N/A					
Invert mode checked:	N/A					
ECL/TTL modes checked:	N/A					
Zout switch checked:	N/A					
Amplitude checked at:	+10V	+20V	+30V	100 Hz, 200		
Actual measured output <sup>2</sup> :	+10.0V	+20.1V	+30V	ns, 0.73 Ohm		
Amplitude polarity:	+					
Zout calibration:	N/A					
Electronic amplitude control:	N/A					
External amplify mode:	N/A					
Ultraviolet flux removed:	N/A					
Monitor V/I Ratio:	N/A	Monitor offset nulled:				
LCD Monitor calibrated:	N/A	Monitor offset nulled:				
Offset checked at:	N/A					
Actual measured output <sup>2</sup> :	N/A					
Offset nulled (output on):	N/A	Amplitude-dependent offset nulled:				
Offset nulled (output off):	N/A					
RS-232 checked:	yes					
Sync pulse width checked:	200 ns					
Circuit Boards:	PS:	93	Main:	108B		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	15k+6.2k		
DC fuses:	Positive:	1A	Negative:	N/A		
AC Current at 115 VAC:	Quiescent:	0.46A	Max. Load:	0.53A		
AC fuse:	1A					
Photographed:	yes					

<sup>1</sup> Checked with: Fluke PM6681 Counter, referenced to Datum ExacTime 9390-6000 GPS Frequency Reference

<sup>2</sup> Checked with: Tektronix TDS3052 digital oscilloscope for PW ≥ 5 ns,  
Tektronix 7704A/7S11/7T11/S4 sampling oscilloscope system for PW < 5 ns.