

PULSE GENERATOR  
PERFORMANCE CHECK

Model: AV02-A3-BP  
S.N.: 9945  
Date: SEPT 25 2001

- a) Output signal amplitude:  
0 TO +100 VOLTS (TO  $R_L \geq 1.0 \Omega$ )  
100 mA MAX
- b) Pulse width:  
50 NS TO 2.0  $\mu$ S  
(0.1% MAX DUTY CYCLE)
- c) Rise time:  
 $\leq 30$  NS
- d) Fall time:  
 $\leq 30$  NS
- e) PRF: 0 TO 20 KHZ  
(0.1% MAX DUTY C)
- f) Jitter, stability:  
OK
- g) Prime power:  
120/240V  
50-60 HZ



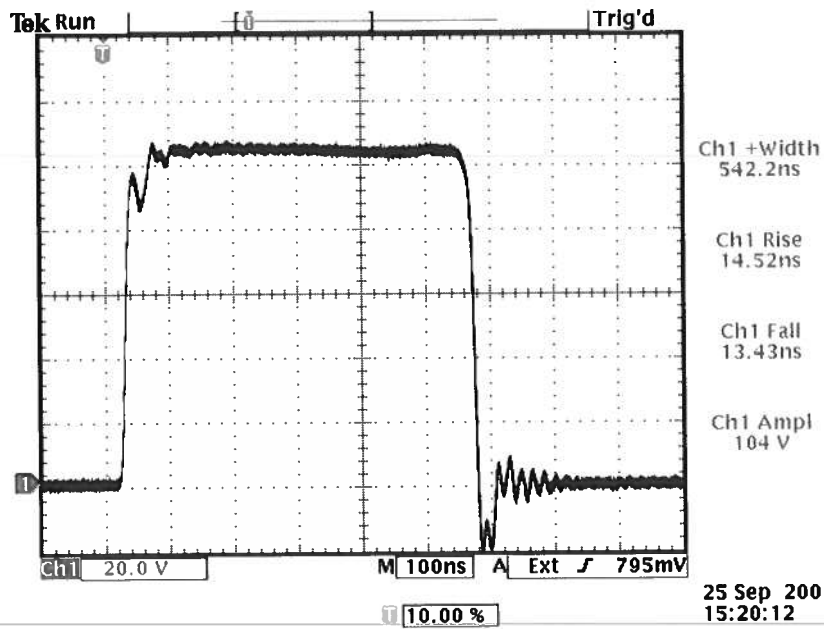
(A)

9945

$$R_c = 1.56 \Omega$$

$$PRF \approx 100 \text{ Hz}$$

LOAD VOLTAGE



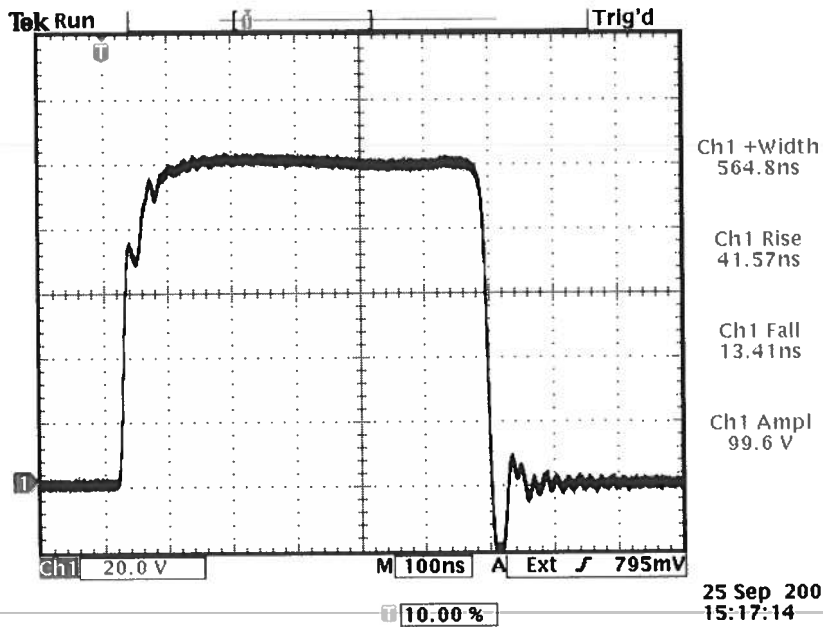
(B)

9945

$$R_c = 0.94 \Omega$$

$$PRF \approx 100 \text{ Hz}$$

LOAD VOLTAGE



©

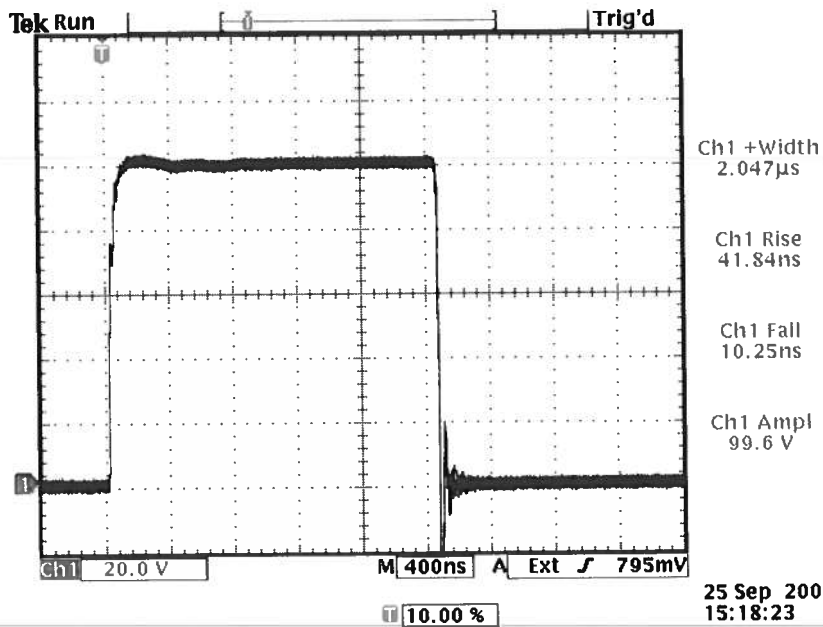
9945

$$R_L = 0.94 \Omega$$

$$PRF = 500 \text{ Hz.}$$

(MAX DUTY CYCLE)

LOAD VOLTAGE





**AVTECH ELECTROSYSTEMS LTD.**  
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**"-B" Functional Test & Calibration Certificate**

Date of test:	September 25, 2001				Tester:	MJC
Programmed model name:	AVOZ-A3-B-P					
Programmed serial number:	9945					
Firmware revision:	2.27					
Internal trigger checked at:	1 Hz	10 Hz	100 Hz	1 kHz	20 kHz	
Actual measured output <sup>1</sup> :	1.001 Hz	9.98 Hz	99.7 Hz	0.997 kHz	20.01 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:	50 ns	100 ns	500 ns	2 us	100 Hz, +100V to 1 Ohm	
Actual measured output <sup>2</sup> :	49.7 ns	102 ns	494 ns	1.98 us		
PWin = PWout mode checked:	N/A			DC mode checked:		
Duty Cycle Limit:	0.1%					
Delay nulled:	yes					
Delay checked at:	100 ns	500 ns	2 us	100 Hz, +100V to 1 Ohm		
Actual measured output <sup>1</sup> :	100.3 ns	505 ns	2.01 us			
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	+30V	+100V	100 Hz, 2 us to 1 Ohm		
Actual measured output <sup>2</sup> :	+10.3V	+30.9V	+103V			
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:	6.2k		
DC fuses:	Positive:	1A	Negative:	N/A		
AC Current at 115 VAC:	Quiescent:	0.43A	Max. Load:	0.64A		
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.