

PULSE GENERATOR  
PERFORMANCE CHECK

Model: *AVR-BA-B-7-FA*

S.N.: *9923*

Date: *OCT 9 2001*

- a) Output signal amplitude:  
*0 TO 1000V (TO  $R_L \geq 50 \Omega$ )*
- b) Pulse width:  
*200 NS TO 200  $\mu$ S*
- c) Rise time:  
*(0.2% MAX DUTY CYCLE)  
 $\leq 100 NS$*
- d) Fall time:  
 *$\leq 100 NS$*
- e) PRF: *0 TO 1 KHz*
- f) Jitter, stability:  
*(0.2% MAX DUTY CYCLE)*
- g) Prime power:  
*OK.*

*170/240V*

*50-60 Hz*



Ⓐ

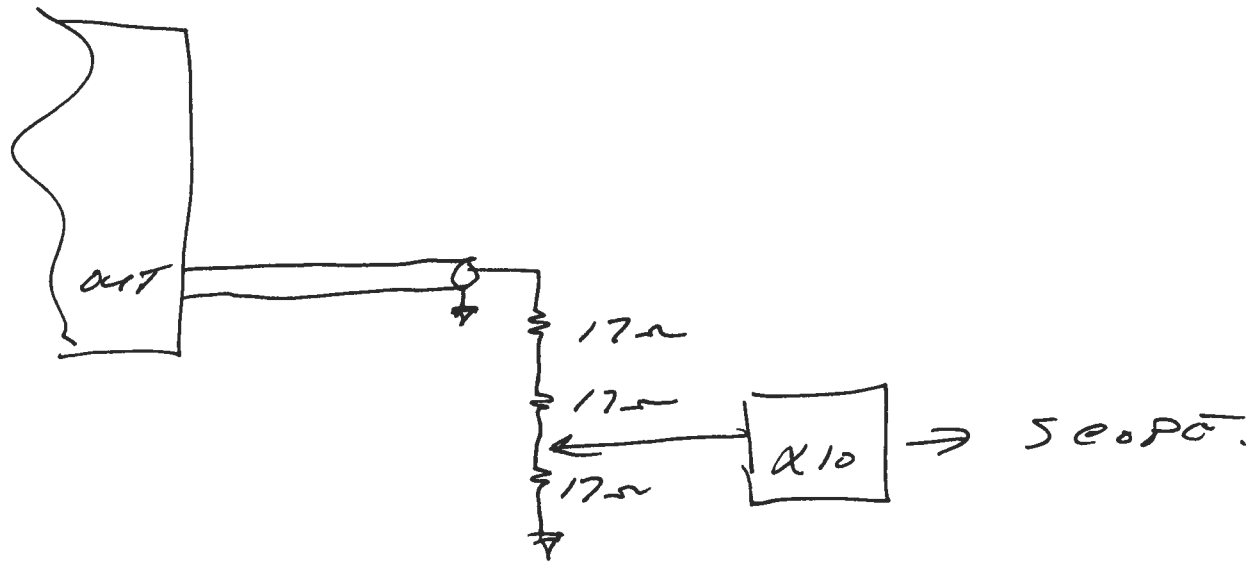
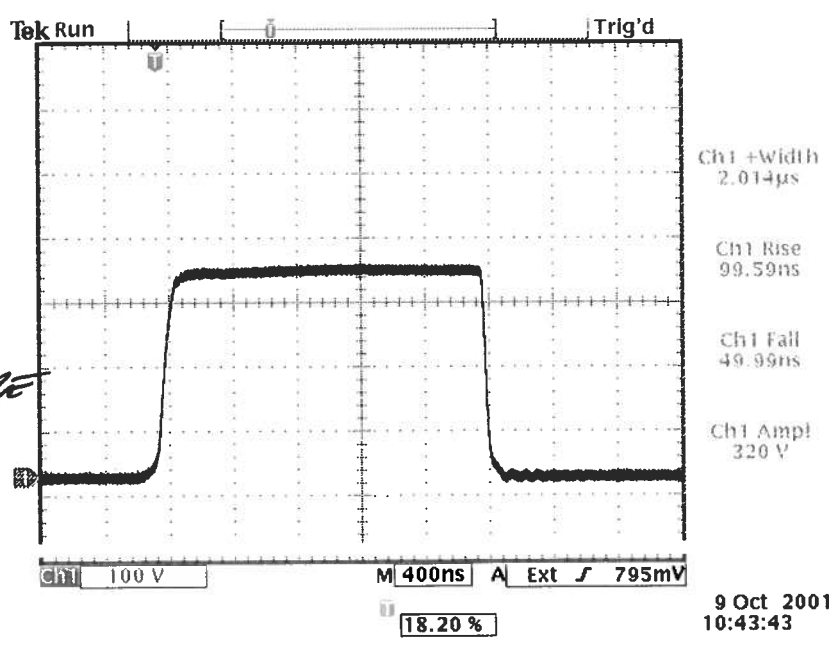
9923

NARROW PULSE

$R_L = 50 \Omega$

$PAF \approx 1 \text{ KHz}$

LOAD  
VOLTAGE



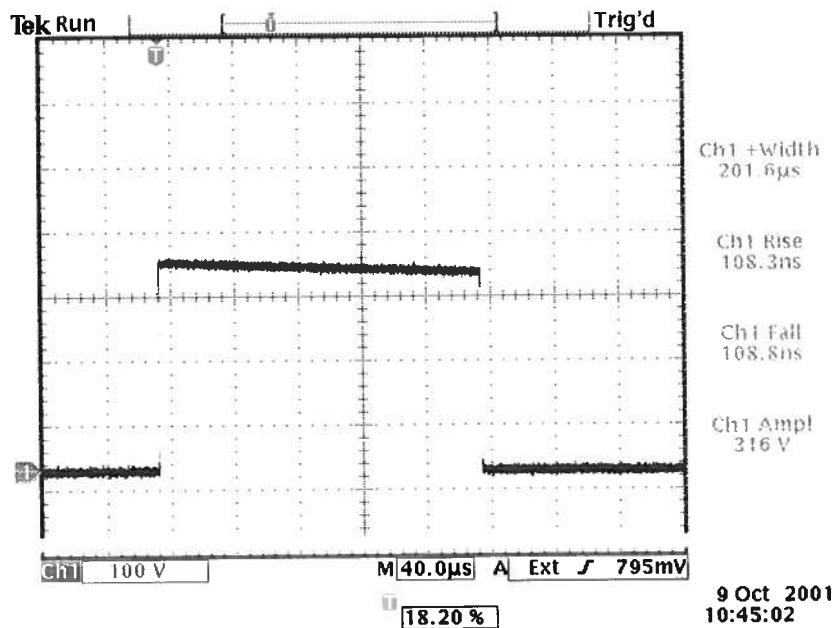
③

9923

WIDE PULSE.

$R_L = 50\Omega$

$PKF \approx 10 \text{ dB}$



LOAD CONNECTION AS  
PER A.



# AVTECH ELECTROSYSTEMS LTD.

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## "-B" Functional Test & Calibration Certificate

Date of test:	October 9, 2001				Tester:	MJC	
Programmed model name:	AVR-8A-B-P-EA						
Programmed serial number:	9923						
Firmware revision:	2.28						
Internal trigger checked at:	1 Hz	10 Hz	100 Hz	1 kHz			
Actual measured output <sup>1</sup> :	1.002 Hz	10.00 Hz	99.90 Hz	0.999 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:	200 ns	2 us	20 us	200 us	1 Hz, +1000V to 50 Ohms		
Actual measured output <sup>2</sup> :	199.2 ns	2.000 us	20.15 us	201.2 us			
PWin = PWout mode checked:	yes	DC mode checked:				N/A	
Duty Cycle Limit:	0.2%						
Delay nulled:	yes						
Delay checked at:	200 ns	2 us	20 us	200 us	1 Hz, +1000V to 50 Ohms		
Actual measured output <sup>1</sup> :	201.3 ns	2.01 us	20.1 us	201.3 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:	+100V	+200V	+500V	+1000V	10 Hz, 10 us to 50 Ohms		
Actual measured output <sup>2</sup> :	+99.8V	+200.2V	+502V	+1001V			
Amplitude polarity:	+						
Zout calibration:	N/A						
Electronic amplitude control:	OK						
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:	2k    1000 uF			
DC fuses:	Positive:	2.5A	Negative:	N/A			
AC Current at 115 VAC:	Quiescent:	0.39A	Max. Load:	1.15A			
AC fuse:	1.5A						
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.