

PULSE GENERATOR
PERFORMANCE CHECK

Model: *AVR-7B-B-PN*
S.N.: *9834*
Date: *JUNE 20 2001*

- a) Output signal amplitude:
0 TO ± 700 VOLTS
- b) Pulse width:
100NS TO 100 US
(R_L > 50Ω)
- c) Rise time:
≤ 30NS
(0.5% MAX DUTY CYCLE)
- d) Fall time:
≤ 30NS
- e) PRF:
0 TO 10 KHz
(0.5% MAX DUTY CYCLE)
- f) Jitter, stability:
OK
- g) Prime power:
120 / 240 V
50-60 Hz



13

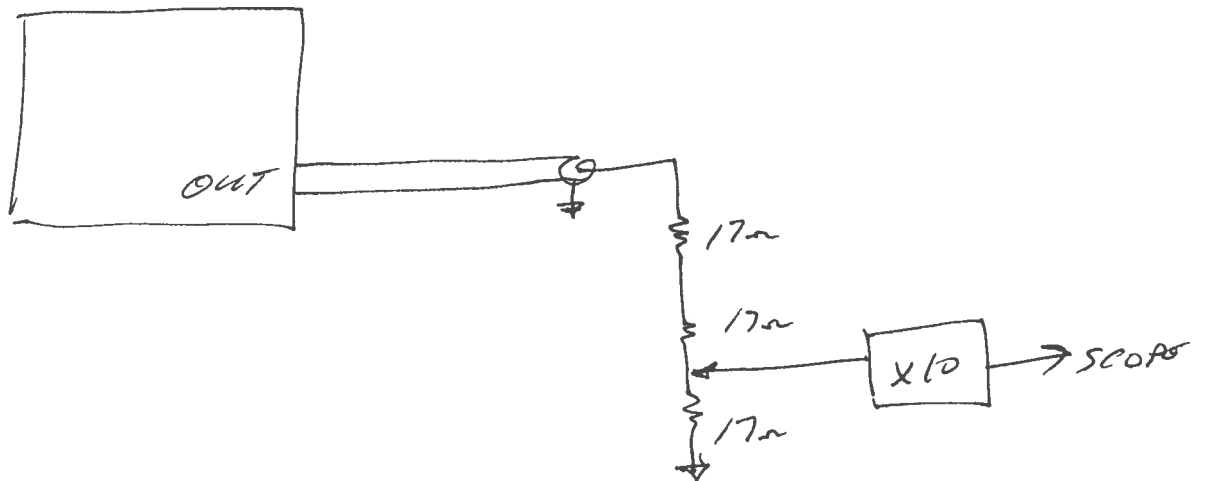
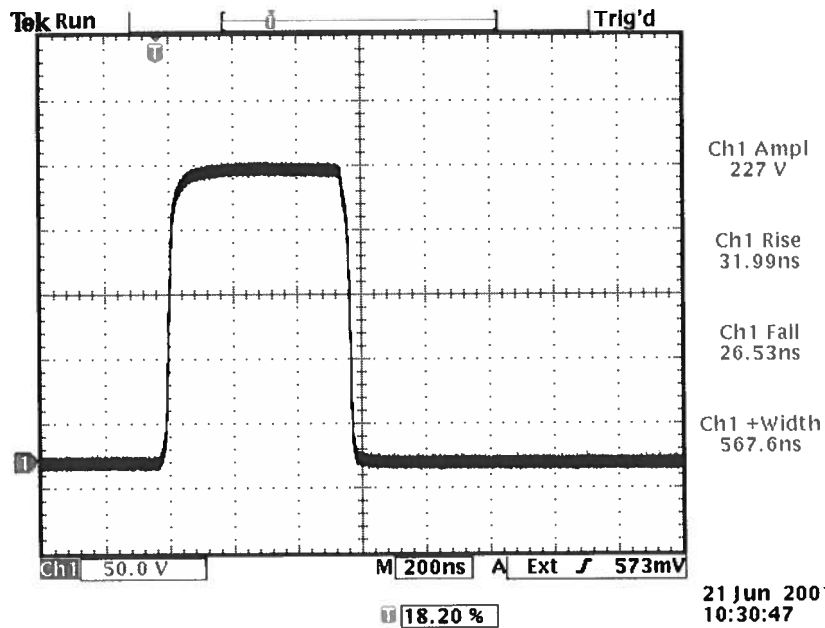
9834

NARROW PULSES

$$R_c = 50 \Omega$$

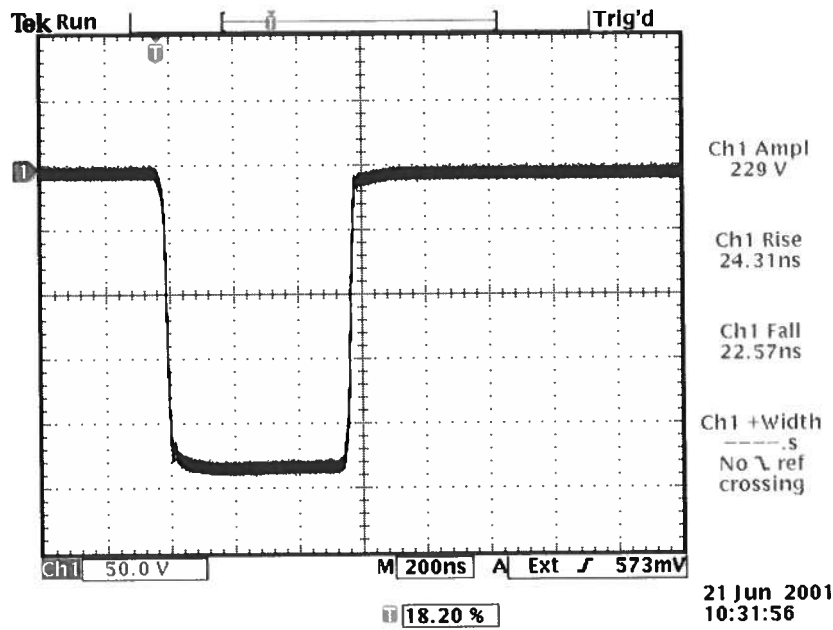
$$PBT = 1 \text{ kHz}$$

POS OUT.



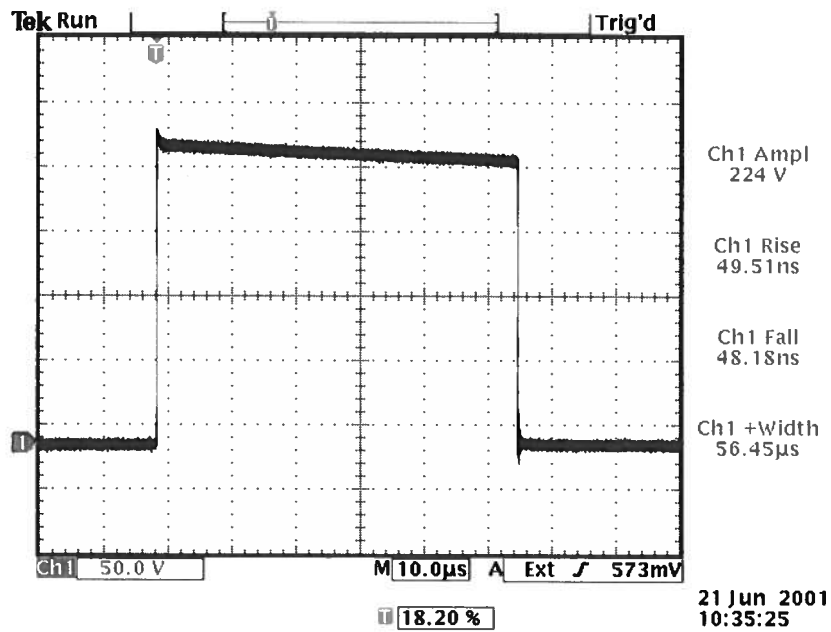
(B)

9834
NARROW PULSE
 $R_c = 50 \Omega$
 $P_{BT} = 1 \text{ KHz}$
NEG OUT



©

983K
WIDE PULSE
 $R_L = 50\Omega$
PRF = 50 Hz
LOAD AS FOR A.
POS OUT.



①

9334

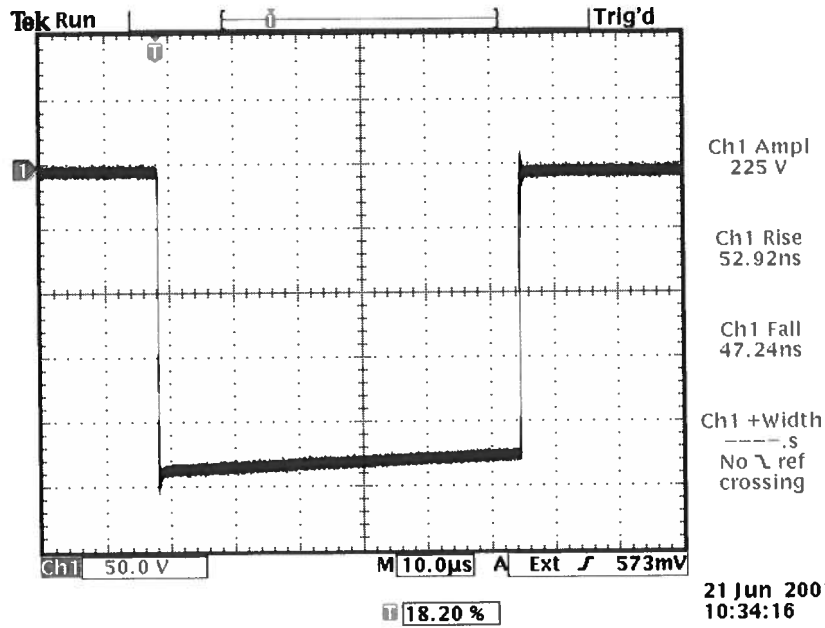
WIDE PULSE

$R_L = 50 \Omega$

$P_{avg} = 50 \text{ W}$

LOAD IS FOR A.

NO OUT.



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"-B" Functional Test & Calibration Certificate

Date of test:	June 20, 2001				Tester:	MJC
Programmed model name:	AVR-7B-B-PN					
Programmed serial number:	9834					
Firmware revision:	2.25					
Internal trigger checked at:	1 Hz	10 Hz	100 Hz	1 kHz	10 kHz	
Actual measured output ¹ :	1.004 Hz	10.02 Hz	100.2 Hz	1.000 kHz	10.01 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:	100 ns	1 us	10 us	100 us	1 Hz, +700V to 50 Ohms	
Actual measured output ² :	101 ns	1.000 us	10.00 us	100.2 us		
PW _{in} = PW _{out} mode checked:	yes			DC mode checked:	N/A	
Duty Cycle Limit:	0.5%					
Delay nulled:	yes					
Delay checked at:	100 ns	1 us	10 us	100 us	1 Hz, +700V to 50 Ohms	
Actual measured output ¹ :	102 ns	1.000 us	9.98 us	100.2 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	-350V	+700V	1 Hz, 10 us, to 50 Ohms	
Actual measured output ² :	-101V	+200V	-350V	+707V		
Amplitude polarity:	+					
Zout calibration:	N/A					
Electronic amplitude control:	N/A					
External amplify mode:	N/A					
Ultravolt 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 ² :	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:	1.5k		
DC fuses:	Positive:	3A	Negative:	N/A		
AC Current at 115 VAC:	Quiescent:	0.44A	Max. Load:	1.25A		
AC fuse:	1.5A					
Photographed:	yes					

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

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