


PULSE GENERATOR
PERFORMANCE CHECK

Model: PV-1011-B
S.N.: 9770
Date: APRIL 11 2001

- a) Output signal amplitude:
0 TO ± 100 V ($R_L \geq 50 \Omega$)
 - b) Pulse width:
100 NS TO 1 MS
(10% MAX DUTY CYCLE)
 - c) Rise time:
 ≤ 10 NS
 - d) Fall time:
 ≤ 10 NS
 - e) PRF: 0 TO 1 MHz.
(10% MAX DUTY CYCLE)
 - f) Jitter, stability:
OK
 - g) Prime power:
120/240 V
50-60 Hz.
- 

(A)

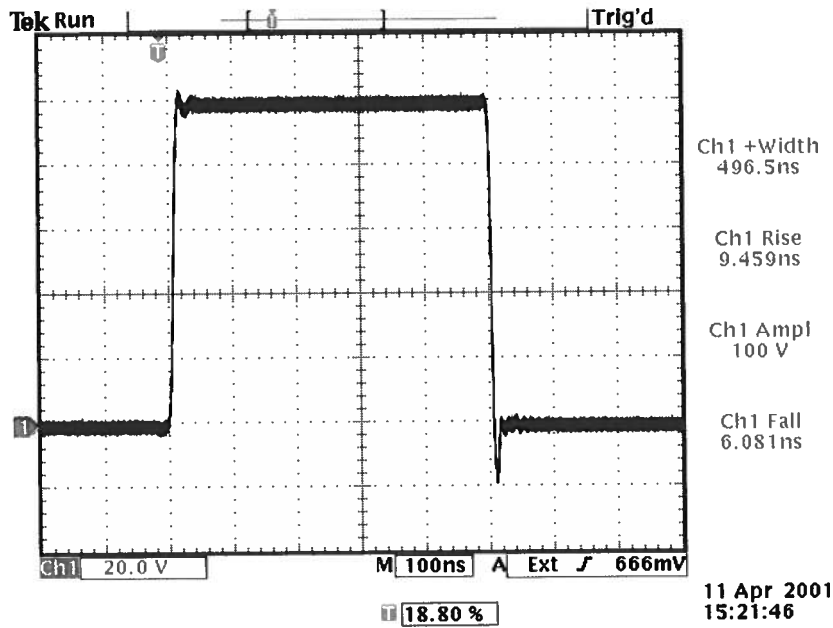
9770

PRF = 100 KHz

POS OUT

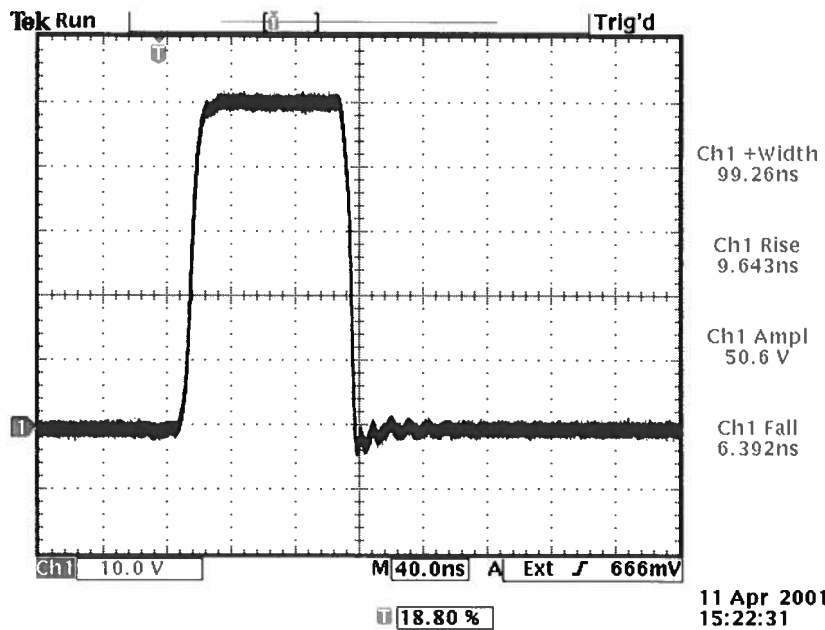
$Z_{out} = 2 \Omega$

$R_c = 50 \Omega$



(B)

9770
PRF = 1 MHz.
POS OUT
 $Z_{out} = 50 \Omega$
 $R_L = 50 \Omega$



©

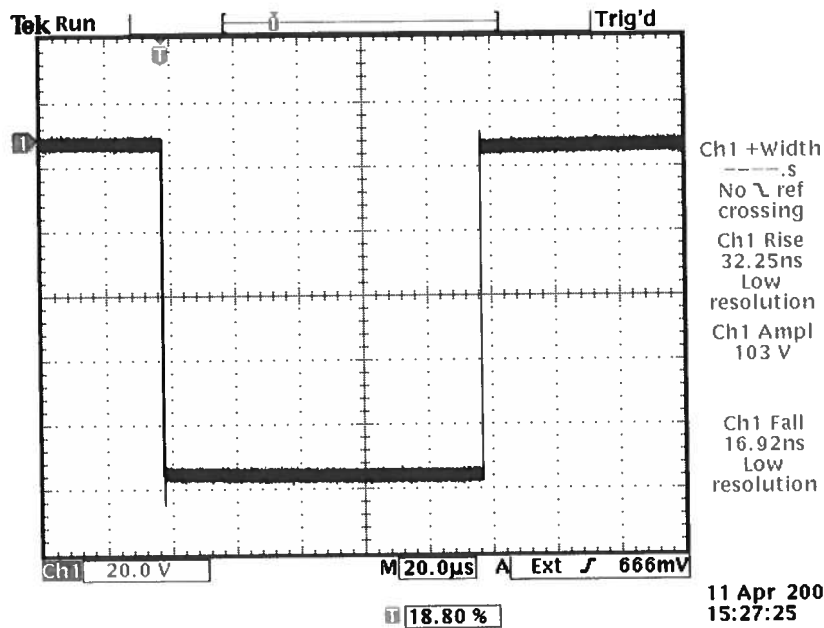
9770

PRF = 100 kHz

NBB OUT

$Z_{out} = 2 \Omega$

$R_L = 50 \Omega$





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 11, 2001				Tester:	MJC
Programmed model name:	AV-1011-B					
Programmed serial number:	9770					
Firmware revision:	2.24					
Internal trigger checked at:	1 Hz	100 Hz	1 kHz	10 kHz	1 MHz	
Actual measured output ¹ :	1.003 Hz	100.0 Hz	1.003 kHz	9.997 kHz	1.002 MHz	
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	1 ms	100Hz, +100V, to 50 Ohms	
Actual measured output ² :	99.2 ns	1.004 us	10.00 us	1.000 ms		
PW _{in} = PW _{out} mode checked:	yes			DC mode checked:	N/A	
Duty Cycle Limit:	10%					
Delay nulled:	yes					
Delay checked at:	100 ns	1 us	10 us	1 ms	100Hz, +100V, to 50 Ohms	
Actual measured output ¹ :	100.0 ns	0.999 us	10.00 us	1.001 ms		
Double pulse checked:	yes					
Invert mode checked:	N/A					
ECL/TTL modes checked:	N/A					
Zout switch checked:	yes					
Amplitude checked at:	-10V	+20V	-50V	+100V	100Hz, 10 us, to 50 Ohms	
Actual measured output ² :	-9.96V	+19.9V	-50.0V	+100.0V		
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 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:	50 ns					
Circuit Boards:	PS:	93	Main:	108B		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	3k		
DC fuses:	Positive:	2A	Negative:	N/A		
AC Current at 115 VAC:	Quiescent:	0.44A	Max. Load:	0.91A		
AC fuse:	1A					
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.