

PULSE GENERATOR
PERFORMANCE CHECK

Model: *AV-1011-B*

S.N.: *9769*

Date: *APRIL 10 2001*

- a) Output signal amplitude:
0 TO ±100V (R_L ≥ 50Ω)
 - b) Pulse width:
100 NS TO 1 μS
(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:
120/240V
50-60Hz
- [Signature]*

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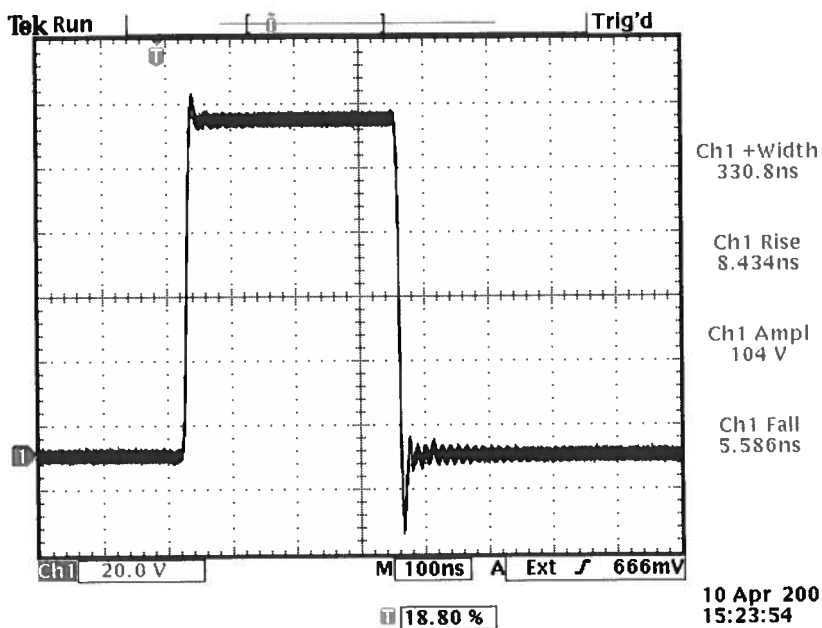
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PRF = 100 kHz.

POS OUT.

$Z_{out} = 2 \Omega$

$R_L = 50 \Omega$



(B)

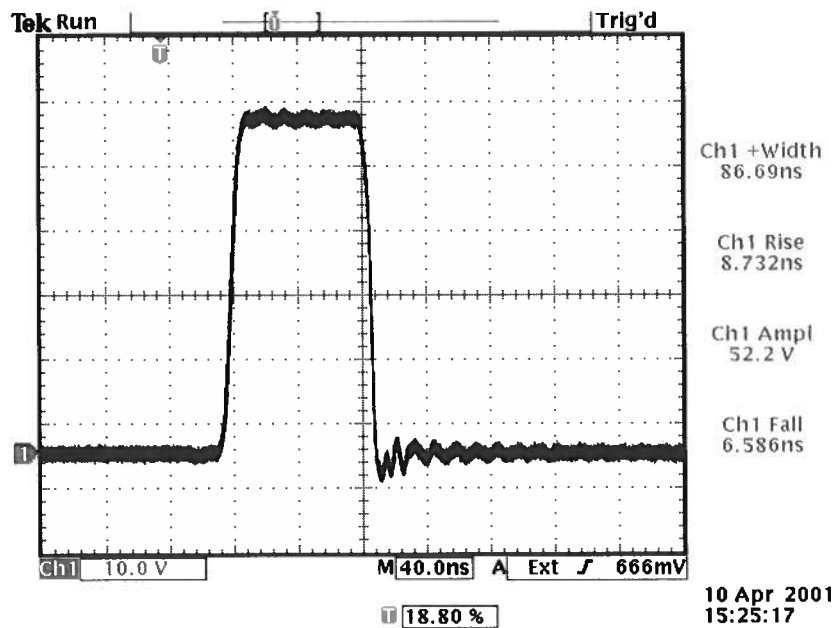
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$$PBF = 1.0 \text{ MHz}$$

$$Z_{out} = 50 \Omega$$

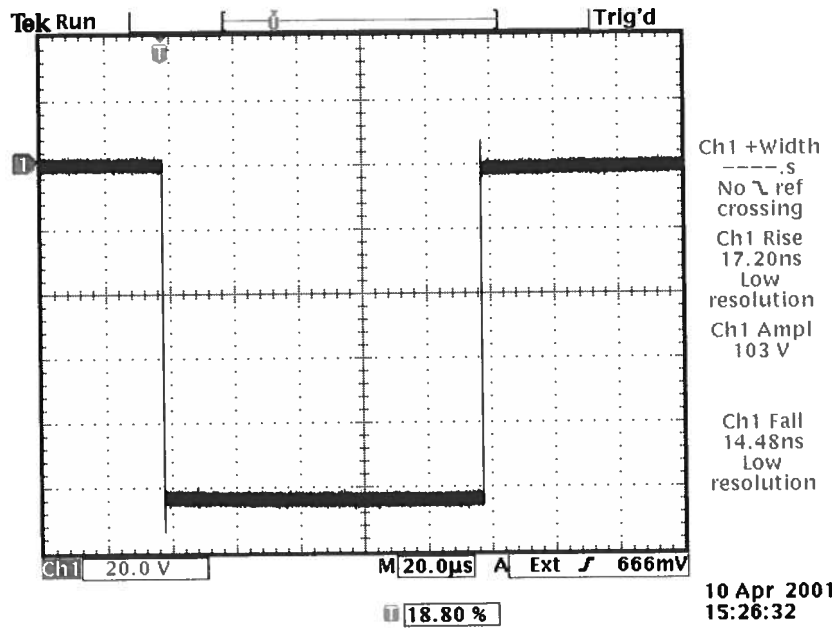
$$R_c = 50 \Omega$$

POS OUT.



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PAF = 100 Hz
 $Z_{out} = 2 \Omega$
 $R_c = 50 \Omega$
NEG OUT.



AVTECH**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 10, 2001				Tester:	MJC
Programmed model name:	AV-1011-B					
Programmed serial number:	9769					
Firmware revision:	2.24					
Internal trigger checked at:	1 Hz	10 Hz	1 kHz	100 kHz	1 MHz	
Actual measured output ¹ :	1.003 Hz	10.01 Hz	1.004 kHz	99.8 kHz	0.999 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	100 Hz, +100V	
Actual measured output ² :	99.5 ns	1.004 us	9.995 us	1.001 ms	to 50 Ohms	
PWin = PWout 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	100 Hz, +100V	
Actual measured output ¹ :	99.4 ns	0.998 us	9.991 us	1.001 ms	to 50 Ohms	
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	100 Hz, 10us	
Actual measured output ² :	-10.0V	+20.0V	-50.0V	+100V	to 50 Ohms	
Amplitude polarity:	+/-					
Zout calibration:	N/A					
Electronic amplitude control:	OK					
External amplify mode:	N/A					
Ultraviolet flux removed:	OK					
Monitor V/I Ratio:	N/A			Monitor offset nulled:		
LCD Monitor calibrated:	N/A			Monitor offset nulled:		
Offset checked at:	N/A			Amplitude-dependent offset nulled:		
Actual measured output ² :	N/A			Amplitude-dependent offset nulled:		
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:	4k		
DC fuses:	Positive:	2A	Negative:	N/A		
AC Current at 115 VAC:	Quiescent:	0.45A	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.