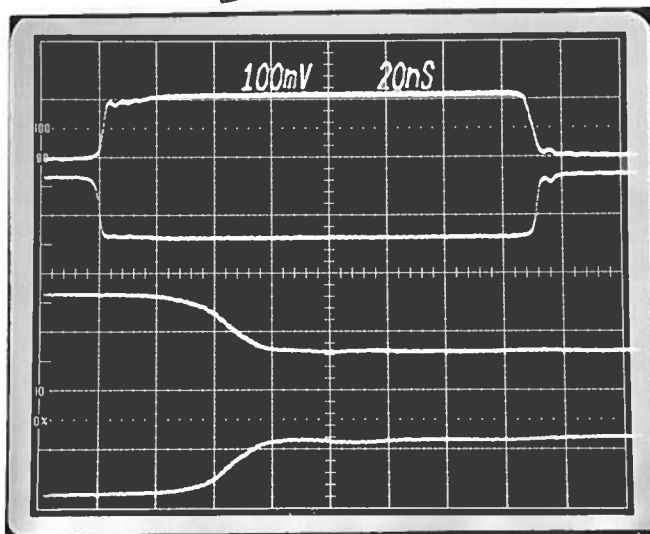


PULSE GENERATOR  
PERFORMANCE CHECK

Model: AV-1011.B1-B

S.N.: 9941

Date: SEPT 20 2001



60 dB ATTEN.: 100 VOLTS/DIV

- ① a) Output signal amplitude:  
0 TO  $\pm 100$  VOLTS (TO 50 $\Omega$ )
- ② b) Pulse width:  
100 NS TO 1 MS  
(5% MAX DUTY CYCLE)
- c) Rise time:  
③  $\leq 2$  NS
- d) Fall time:  
④  $\leq 2$  NS
- e) PRF:  
0 TO 100 KHz  
(5% MAX DUTY CYCLE)
- f) Jitter, stability:  
OK
- g) Prime power:  
120/240 VOLTS  
50-60 Hz

①  $F_{out}$ , 20 NS/DIV

②  $N_{out}$ , 20 NS/DIV

③  $N_{out}$ , 2 NS/DIV (RISE TIME, 20-80%)

④  $F_{out}$ , 2 NS/DIV (RISE TIME, 20-80%)

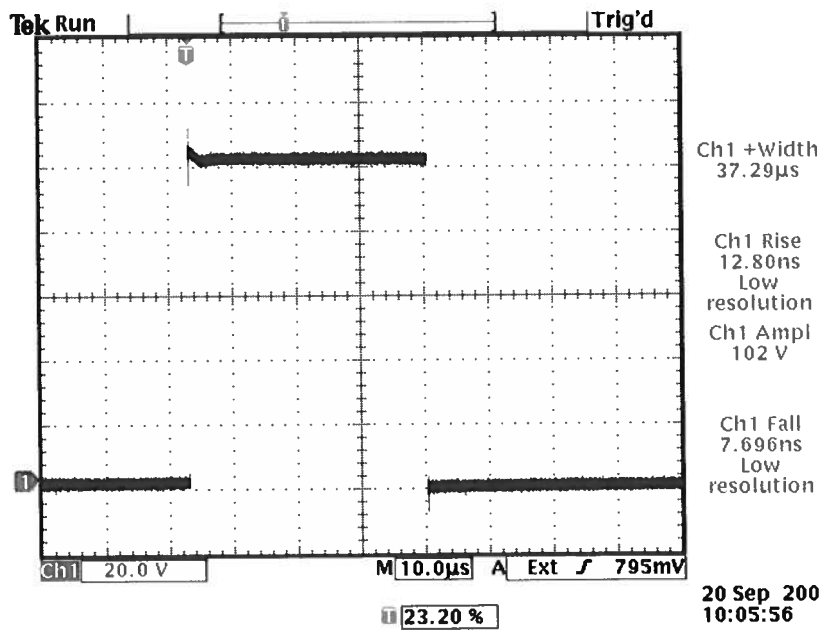
PRF = 10 KHz.

9941

WIDE PULSE

$R_L = 50\Omega$

PRF = 100 Hz





**AVTECH ELECTROSYSTEMS LTD.**  
 NANOSECOND WAVEFORM ELECTRONICS  
 SINCE 1975

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**"-B" Functional Test & Calibration Certificate**

Date of test:	September 19, 2001				Tester:	MJC
Programmed model name:	AV-1011B1-B					
Programmed serial number:	9941					
Firmware revision:	2.27					
Internal trigger checked at:	1 Hz	100 Hz	1 kHz	10 kHz	100 kHz	
Actual measured output <sup>1</sup> :	0.997 Hz	99.7 Hz	0.998 kHz	9.99 kHz	100.1 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	1 ms	50 Hz, +100V	
Actual measured output <sup>2</sup> :	98.5 ns	0.995 us	10.02 us	1.002 ms	to 50 Ohms	
PWin = PWout mode checked:	yes	DC mode checked:			N/A	
Duty Cycle Limit:	5%					
Delay nulled:	yes					
Delay checked at:	100 ns	1 us	10 us	1 ms	50 Hz, +100V	
Actual measured output <sup>1</sup> :	99.6 ns	0.998 us	10.00 us	1.003 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, 1 us,	
Actual measured output <sup>2</sup> :	-10.0V	+20.0V	-50.2V	+99.6V	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 <sup>2</sup> :	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:	108		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	3k		
DC fuses:	Positive:	2A	Negative:	N/A		
AC Current at 115 VAC:	Quiescent:	0.46A	Max. Load:	0.75A		
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.