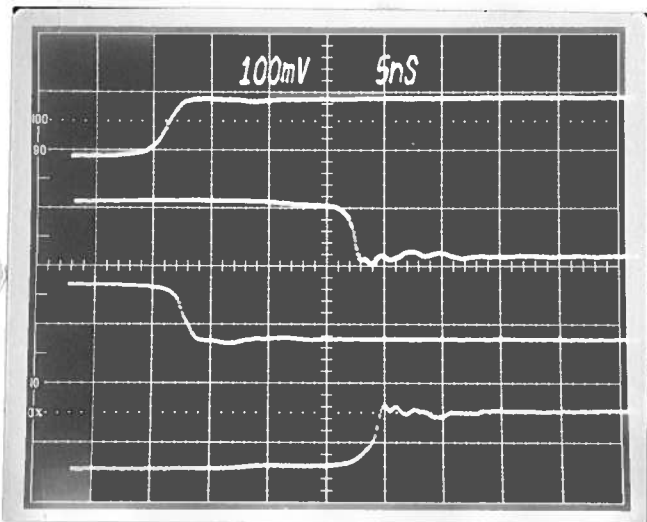


PULSE GENERATOR
PERFORMANCE CHECK

Model: *AU-1011B1-B*

S.N.: *10983*

Date: *AUG 20 2004*



60dB ATTN.: 100V/DIV

- a) Output signal amplitude:
0 TO ±100V (TO 50%)
- b) Pulse width:
100 ns TO 1 ms
(5% MAX DUTY CYCLE)
- c) Rise time:
≤ 2 ns
- d) Fall time:
≤ 2 ns
- e) PRF: *0 TO 100 kHz*
(5% MAX DUTY CYCLE)
- f) Jitter, stability:
OK
- g) Prime power:
100 → 240 V
50 - 60 kHz

① *Pout: 5 ns/DIV, RISE TIME (20-80%)*

② *Pout: 5 ns/DIV, FALL TIME*

③ *Nout: 5 ns/DIV, RISE TIME*

④ *Nout: 5 ns/DIV, FALL TIME*

PRF ≈ 10 kHz

PW ≈ 100 ns

10983

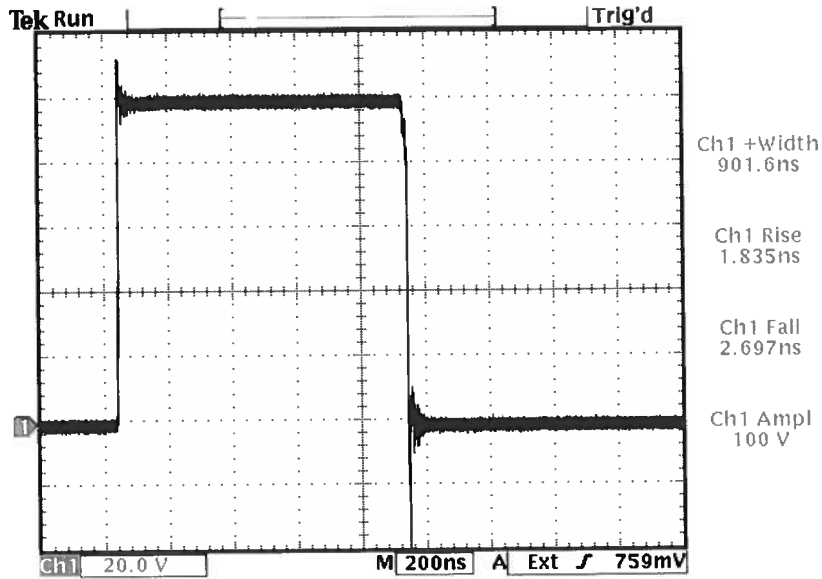
NARROW PULSE

POS OUT

$R_L = 50 \Omega$

PRF = 10 KHz

300 MHz 300PE
(TEK TDS 3032)



11.40 %

20 Aug 2004
11:30:58

10983

WIDE PULSE

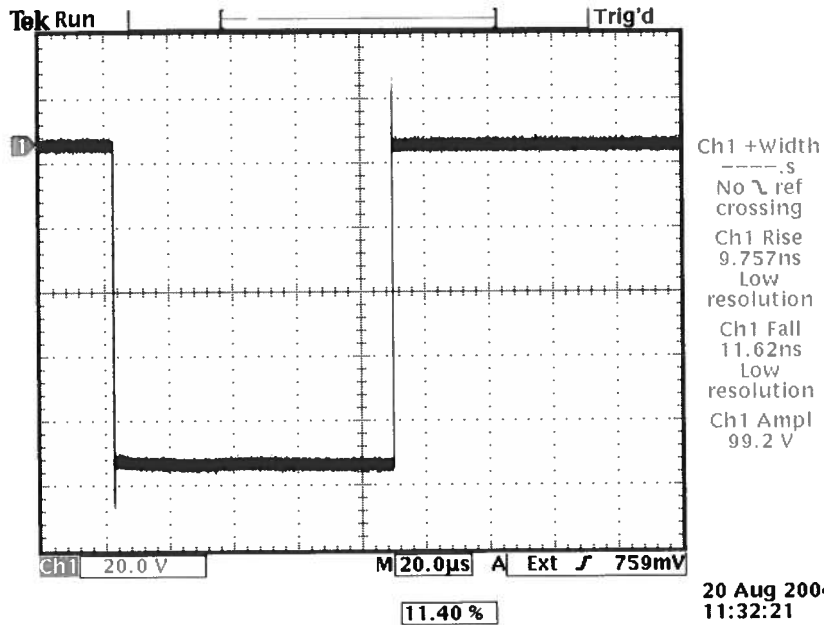
NEG OUT

$R_L = 50\ \Omega$

PRF = 100 kHz

300 MHz SCOPE

(TEK TDS 3032)





AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS
SINCE 1975

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http://www.avtechpulse.com/

BOX 5120, LCD MERIVALE
OTTAWA, ONTARIO
CANADA K2C 3H4
TEL: (613) 226-5772
FAX: (613) 226-2802

"-B" Functional Test & Calibration Certificate

Date of test:	August 20, 2004				Tester:	MJC
Programmed model name:	AV-1011B1-B					
Programmed serial number:	10983	MAC address:	N/A			
Firmware revision:	2.58					
Internal trigger checked at:	1 Hz	100 Hz	1 kHz	10 kHz	100 kHz	
Actual measured output ¹ :	1.004 Hz	100.3 Hz	1.002 kHz	9.98 kHz	99.5 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 to 50 Ohms	
Actual measured output ² :	99.4 ns	1.001 us	10.04 us	1.04 ms		
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 to 50 Ohms	
Actual measured output ¹ :	99.7 ns	1.000 us	10.01 us	100.1 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	10 kHz, 1 us to 50 Ohms	
Actual measured output ² :	-9.9V	+20.0V	-50.0V	+100.0V		
Amplitude polarity:	+/-					
Zout calibration:	N/A					
Electronic amplitude control:	OK					
External amplify mode:	N/A					
Bleeder resistors adequate:	N/A					
Burst mode:	N/A					
Monitor V/I Ratio:	N/A				Monitor offset nulled:	
LCD Monitor calibrated:	N/A					
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					
LCD pull-ups installed:	N/A					
PCB 108H oscillator resistor update:	N/A					
PN trigger pull-downs installed:	N/A					
Sync pulse width checked:	200 ns nominal					
Circuit Boards:	PS:	158E	Main:	108E		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	3.9k		
DC fuses:	Main:	2A	Overload:	1.6A		
AC Current:	Quiescent:	0.27A @ 115V 0.18A @ 230V	Max. Load:	0.52A @ 115V 0.28A @ 230V		
AC fuse:	0.8A					
1.5 kV RMS, 5 second Hypot Test:	OK					
25A RMS Ground Continuity Test:	OK					
Fan operational:	Yes					
Photographed:	Yes					

¹ Checked with: Fluke PM6681 Counter (S/N 9446 066 81016), referenced to Datum ExacTime 9390-6000 (S/N 4461) GPS Frequency Reference

² Checked with: Tektronix TDS3052 digital oscilloscope (S/N B014783) for PW ≥ 5 ns, Tektronix 7704A/7S11/7T11/S4 sampling oscilloscope (Cal. Label 112506) for PW < 5 ns.