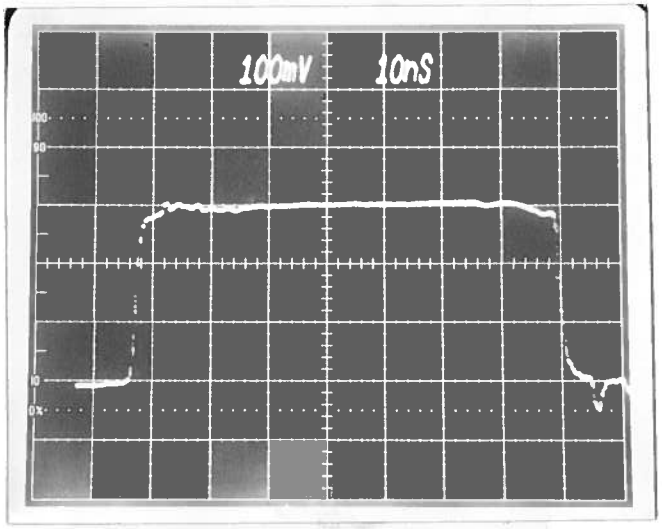
PULSE GENERATOR

PERFORMANCE CHECK

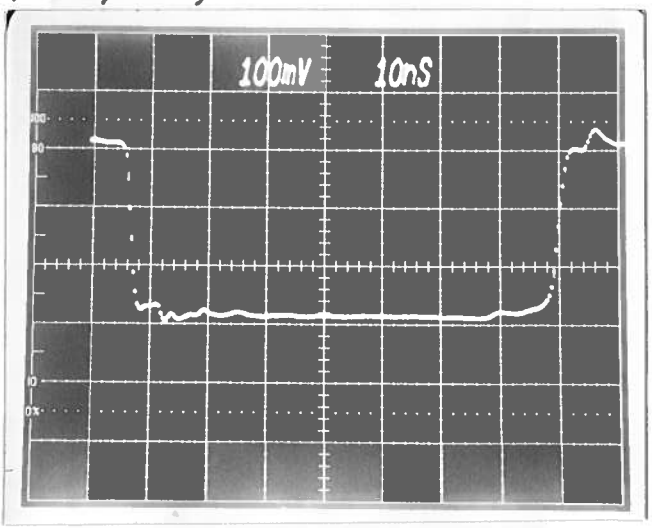
Model: PN-1011B1-8-MJCA-OT

S.N.: 10961

Date: SEPT 8 2004



POS OUT V. NARROW PULSE
10V/DIV, 10NS/DIV



NEG OUT, V. NARROW PULSE
10V/DIV, 10 NS/DIV
PRF = 10 KHZ

a) Output signal amplitude:
0 TO ± 30 V (TOSON)

b) Pulse width:
50 NS TO 1 MS
(5% MAX DUTY CYCLE)

c) Rise time:
≤ 1.5 NS

d) Fall time:
≤ 1.5 NS

e) PRF: 0 TO 100 KHZ
(5% MAX DUTY CYCLE)

f) Jitter, stability:
OK

g) Prime power: 100 → 240V
50 – 60 HZ

h) DC OFFSET: 0 TO ±10V.

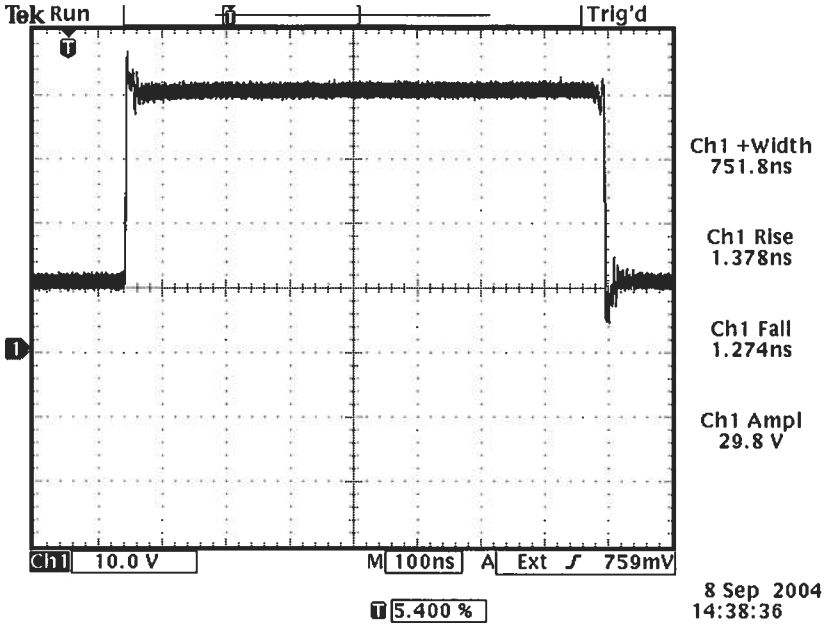
(A)

1096L

LOW PW

POS OUT

+10V DC OFFSET, 1KHz

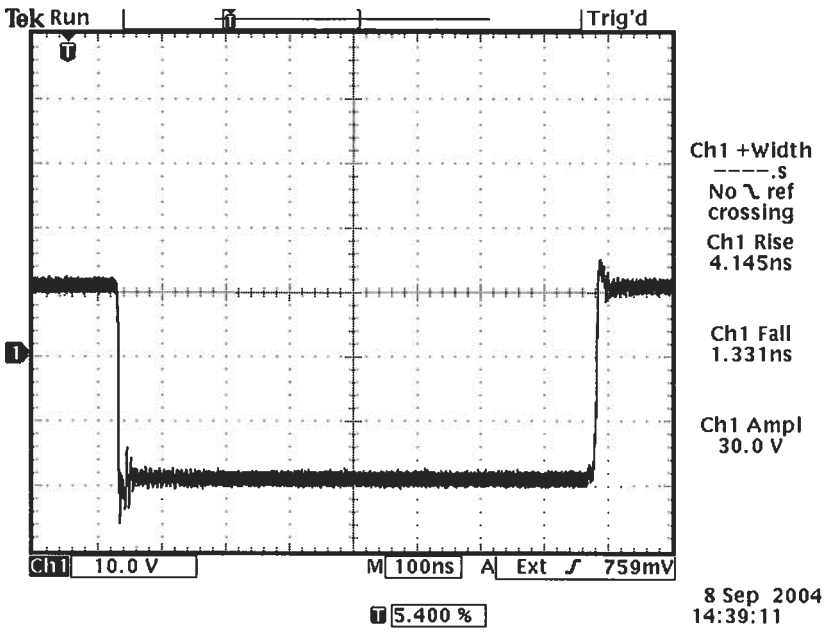


300 MHz SCOPE

(B)

10961

LOW PW
NEG OUT
+10 V DC OFFSET
1 KHz



300 MHz SCOPE

(C)

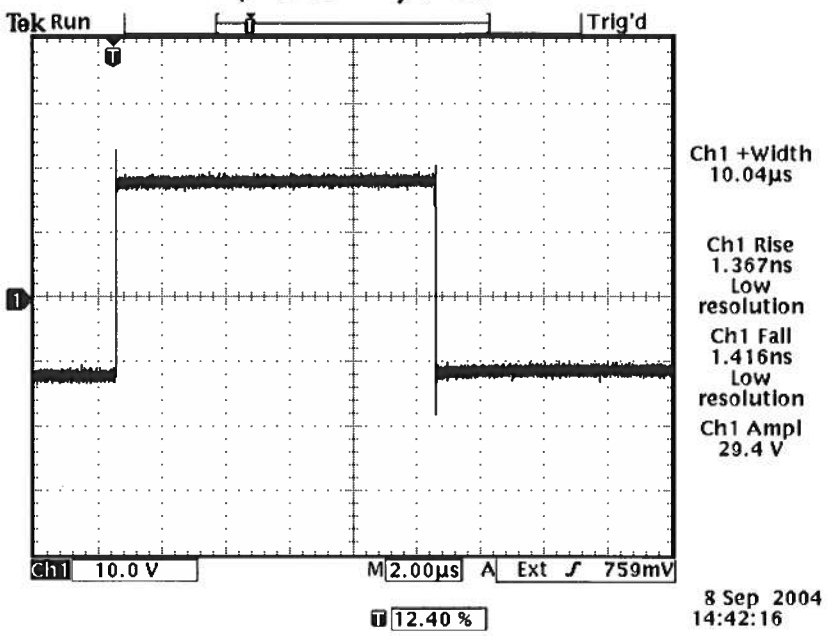
10961

MED PW

POS OUT

-10 V DC OFFSET

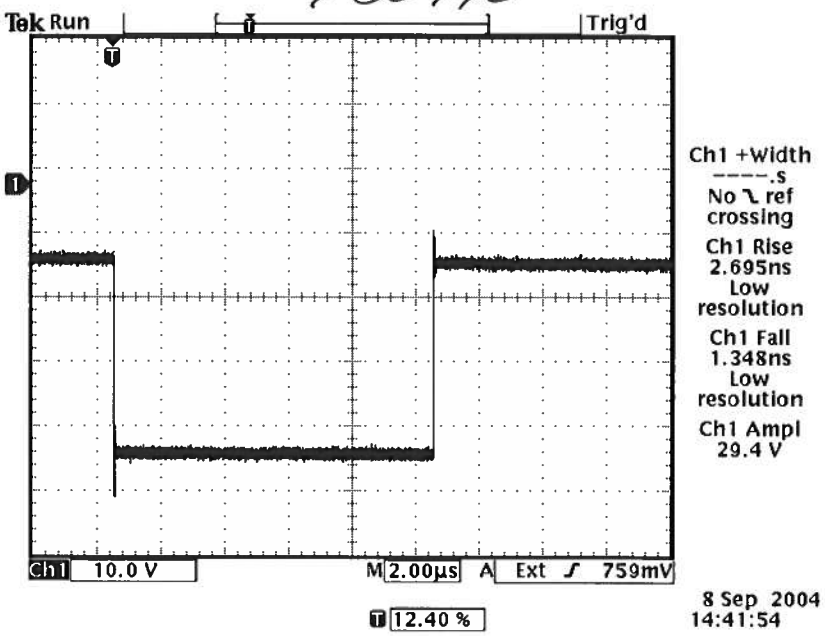
100 Hz



300 mHz Scope

(D)

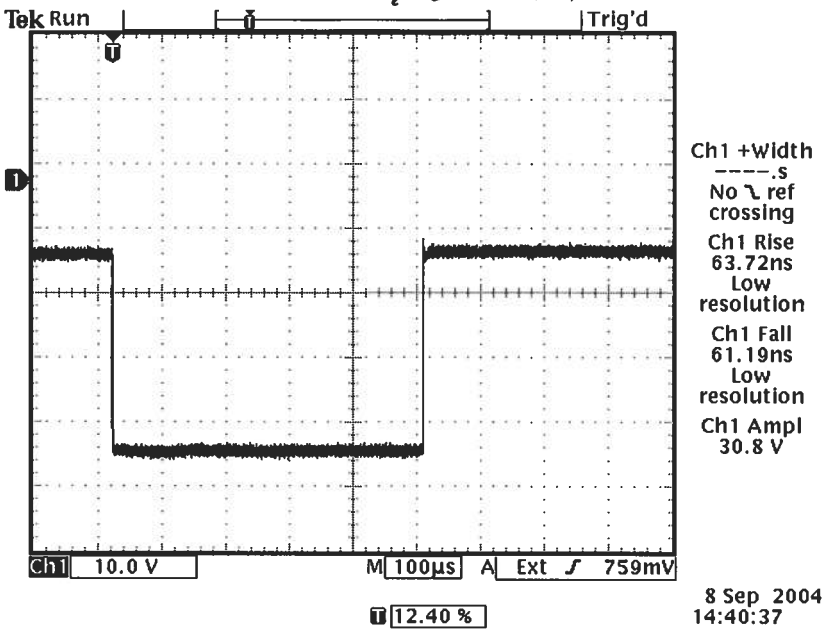
10961
MED PW
NEG OUT
~10 V DC OFFSET
100 kHz



300 MHz SCOPE

(2)

L0961
VOUT WIDE PW
NEG OUT
-10V DC OFFSET
10 HZ



300 MHz SCOPE

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SINCE 1975

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CANADA K2C 3H4
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FAX: (613) 226-2802

"-B" Functional Test & Calibration Certificate

Date of test:	September 8, 2004			Tester:	MJC
Programmed model name:	AV-1011B1-B-OT-MJLA				
Programmed serial number:	10961		MAC address:	N/A	
Firmware revision:	2.59				
Internal trigger checked at:	1 Hz	100 Hz	1 kHz	10 kHz	100 kHz
Actual measured output[1]:	1.002 Hz	99.7 Hz	1.000 kHz	9.96 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:	50 ns	1 us	200 us	1 ms	10 Hz, +30V
Actual measured output[2]:	49.8 ns	1.007 us	201.8 us	1.004 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	100 us	10 ms	10 Hz, +30V
Actual measured output[1]:	99.7 ns	1.005 us	100.7 us	10.03 ms	to 50 Ohms
Double pulse checked:	Yes				
Invert mode checked:	N/A				
ECL/TTL modes checked:	N/A				
Zout switch checked:	N/A				
Amplitude checked at:	-3V	+10V	-20V	+30V	10 Hz, 10 us
Actual measured output[2]:	-3.02V	+10.0V	-20.1V	+30.0V	to 50 Ohms
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:	-10V	0V	+10V		Into 50.0Ω
Actual measured output[2]:	-10.04V	-0.001V	+9.95V		(IET HPRS)
Offset nulled (output on):	Yes		Amplitude-dependent offset nulled:		N/A
Offset nulled (output off):	Yes				
RS-232 checked:	Yes				
LCD pull-ups installed:	N/A				
PCB 108H oscillator resistor update:	Yes				
PN trigger pull-downs installed:	N/A				
Sync pulse width checked:	100 ns nominal				
Circuit Boards:	PS:	158E	Main:	108H	
Overload Trigger Resistance:	Trips at:	5.0 k	Installed:	3.9 k	
DC fuses:	Main:	2A	Overload:	1.6A	
AC Current:	Quiescent:	0.33A @ 115V 0.20A @ 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.