

PULSE GENERATOR
PERFORMANCE CHECK

Model: AV-108B-3-B-N

S.N.: 9791

Date: JUL 25 2001

- a) Output signal amplitude:
0 to 200 AMP
(to 0 to 20 V)
- b) Pulse width:
10 us to 1 ms
(10% max duty cycle)
- c) Rise time:
 $\leq 7 \mu s$
- d) Fall time:
 $\leq 7 \mu s$
- e) PRF: 0 to 1 kHz
(10% max duty cycle)
- f) Jitter, stability:
OK
- g) Prime power:
 - a) 120/240 V, 50 to 60 Hz
 - b) 0 to 24 VDC,
20 AMP LAB
POWER SUPPLY.



(A)

9791
WIDE PULSE, MATA DUTY CYCLE

$$R_L = 0.1 \Omega$$

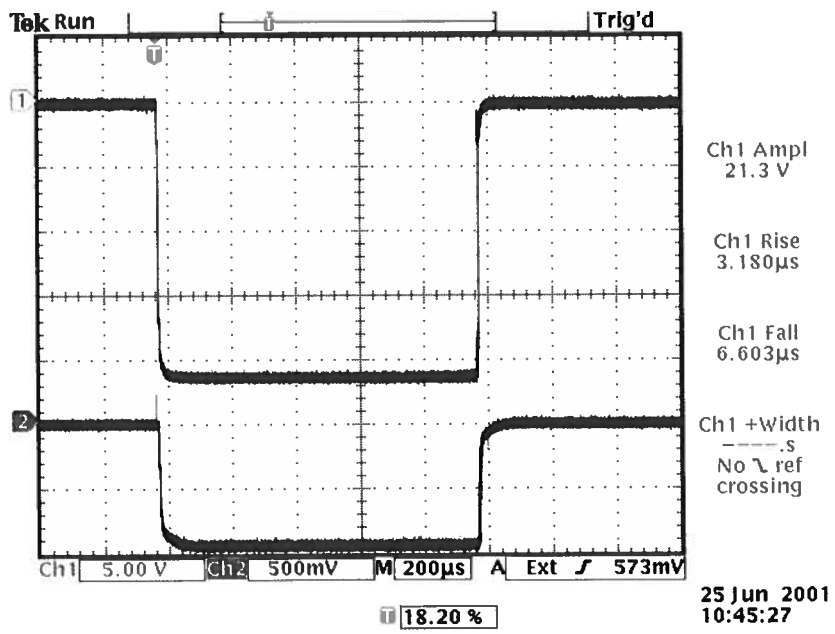
$$\hat{I} = 200 \text{ AMPS}$$

$$PRF = 100 \text{ Hz}$$

$$PW = 1 \text{ nS}$$

V_{LOAD}

V_{MATA}



(B)

9791

NARROW PULSE

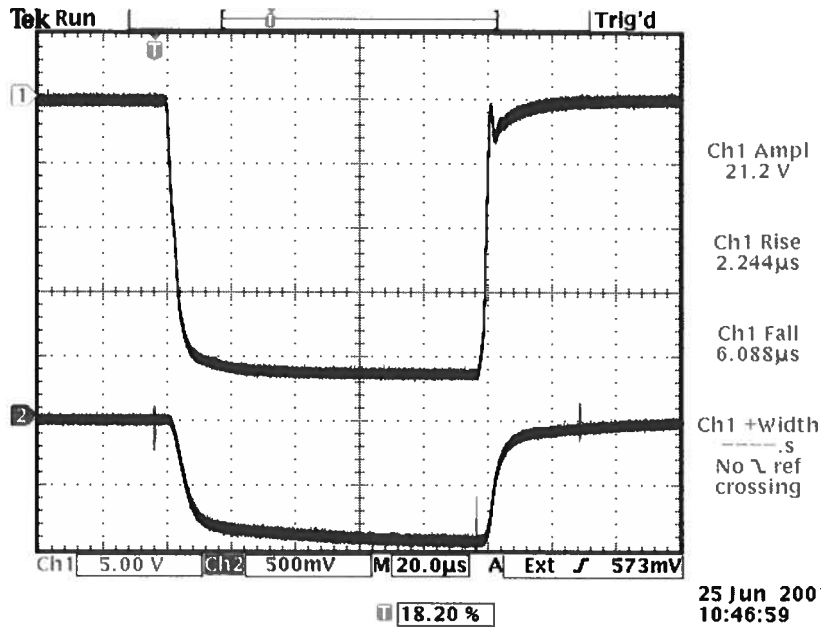
$$R_c = 0.1 \Omega$$

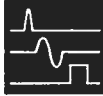
$$\hat{I} = 200 \text{ Amps}$$

$$PRF = 1 \text{ kHz}$$

V_{LOAD}

V_{MON}



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"-B" Functional Test & Calibration Certificate

Date of test:	June 25, 2001				Tester:	MJC
Programmed model name:	AV-108B-3-B-N					
Programmed serial number:	9791					
Firmware revision:	2.26					
Internal trigger checked at:	1 Hz	10 Hz	100 Hz	1 kHz		
Actual measured output ¹ :	1.002 Hz	10.00 Hz	100.0 Hz	0.997 kHz		
External trigger checked:	yes	Gate checked:			yes	
Manual trigger checked:	yes					
Pulse compression checked:	yes	Low Amplitude PW Distortion Nulled:				
Pulse width checked at:	10 us	100 us	1 ms			
Actual measured output ² :	9.7 us	100.1 us	1.003 ms	-200A to 0.1 Ohms, 100 Hz		
PWIn = PWout mode checked:	yes	DC mode checked:				N/A
Duty Cycle Limit:	10%					
Delay nulled:	yes					
Delay checked at:	10 us	100 us	1 ms			
Actual measured output ¹ :	10.00 us	100.4 us	1.003 ms	TTL trig to SYNC out		
Double pulse checked:	N/A					
Invert mode checked:	N/A					
ECL/TTL modes checked:	N/A					
Zout switch checked:	N/A					
Amplitude checked at:	-50 A	-100 A	-200 A			
Actual measured output ² :	-54 A	-109 A	-213 A	1 ms, 100 Hz, to 0.1 Ohms		
Amplitude polarity:	-					
Zout calibration:	N/A					
Electronic amplitude control:	N/A					
External amplify mode:	N/A					
Ultravolt flux removed:	N/A					
Monitor V/I Ratio:	1V / 200A	Monitor offset nulled:			yes	
LCD Monitor calibrated:	yes	Monitor offset nulled:			yes	
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:	200 ns					
Circuit Boards:	PS:	93	Main:	108B		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	N/A		
DC fuses:	Positive:	N/A	Negative:	N/A		
AC Current at 115 VAC:	Quiescent:	0.43A (no PG)	Max. Load:	N/A		
AC fuse:	1 A					
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.