PULSE GENERATOR

PERFORMANCE CHECK

Model: AV-106B-B-P-SPSLA

S.N.: 9809

Date: JULY 12 2001

a) Output signal amplitude:
0 TO +50 VOLTS
(-70 TO +6 VOLTS)

b) Pulse width:
2 TO 50 µS
(5% MAX DUTY CYCLE)

c) Rise time:
≤ 1 µS*

d) Fall time:
≤ 1 µS*

e) PRF:
0 TO 1 KHz
(5% MAX DUTY CYCLE)

f) Jitter, stability:
OK

g) Prime power:
120/240 V
50-60 Hz.

* RISE TIME OF MONITOR CIRCUIT IS ABOUT 2 µS.

(A)

9809

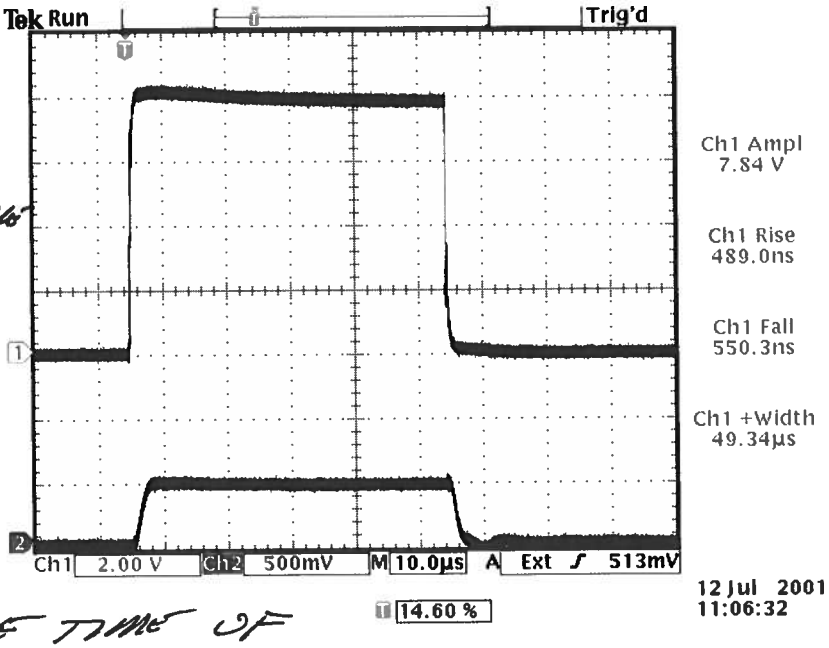
MAX AMPLITUDE

MAX DUTY CYCLE

$R_L \simeq 0.145\ \Omega$

PRF = 1 KHz

PW = 500 µs



LOAD VOLTAGE

MONITOR VOLTAGE

NOTE RISE TIME OF MONITOR CIRCUIT IS ABOUT 2 µS.

(B)

9509

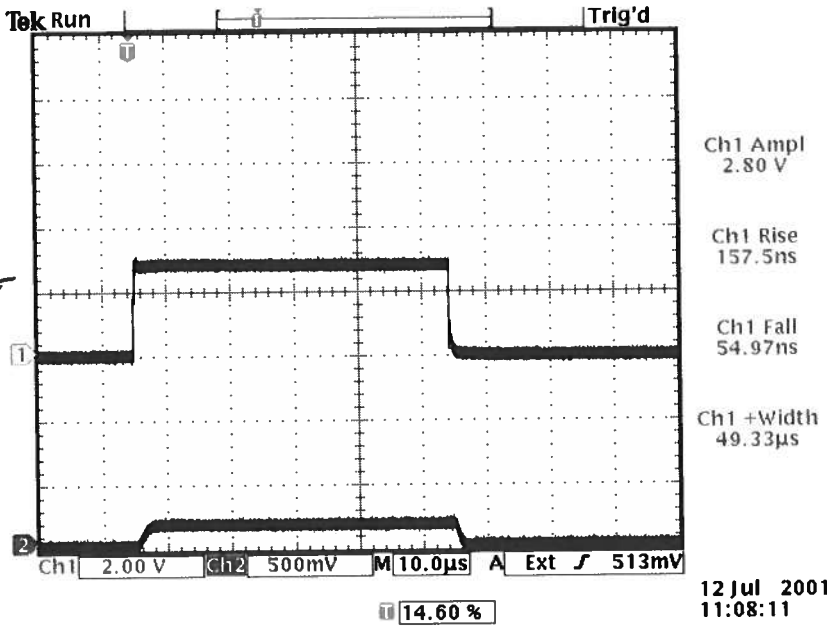
I_p = 20 amps

MAX DUTY CYCLE

R_L = 0.145Ω

PRF = 1 KHz

PW = 50uS



LOAD VOLTAGE

MONITOR VOLTAGE

(C)

9309

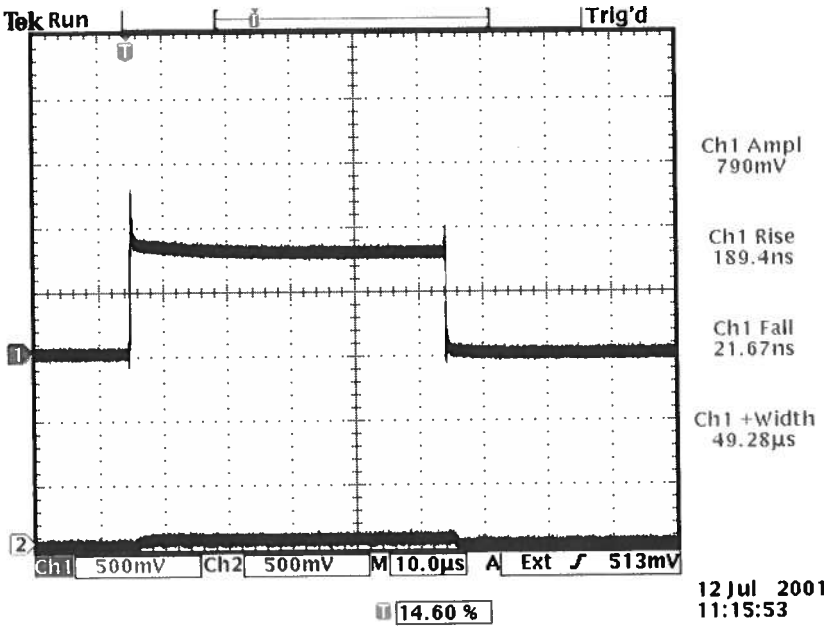
$I_D \simeq 5$ AMPS

MAX DUTY CYCLE

$R_L \simeq 0.145\Omega$

PRF = 1 KHz

PW = 50 uS.



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"-B" Functional Test & Calibration Certificate

Date of test:	July 12, 2001			Tester:	MJC
Programmed model name:	AV-106B-B-P-SPSLA				
Programmed serial number:	9809				
Firmware revision:	2.26				
Internal trigger checked at:	1 Hz	10 Hz	100 Hz	1 kHz	
Actual measured output[1]:	1.000 Hz	9.997 Hz	99.92 Hz	0.999 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:	2 us	10 us	50 us		10 Hz, +5A to 0.164 Ohms
Actual measured output[2]:	1.997 us	9.97 us	50.48 us		
PWin = PWout mode checked:	yes			DC mode checked:	N/A
Duty Cycle Limit:	5%				
Delay nulled:	N/A				
Delay checked at:	100 ns	1 us	10 us	200 us	TTL trigger to SYNC
Actual measured output[1]:	99.0 ns	1.000 us	9.99 us	201.6 us	
Double pulse checked:	N/A				
Invert mode checked:	N/A				
ECL/TTL modes checked:	N/A				
Zout switch checked:	N/A				
Amplitude checked at:	+2A	+10A	+20A	+50A	10 Hz, 50 us to 0.164 Ohms
Actual measured output[2]:	+2.01A	+9.94A	+19.6A	+50.0A	
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:	9.4 mV/A			Monitor offset nulled:	N/A
LCD Monitor calibrated:	N/A			Monitor offset nulled:	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				
Sync pulse width checked:	200 ns				
Circuit Boards:	PS:	93	Main:	108B	
Overload Trigger Resistance:	Trips at:	N/A	Installed:	2.2k	
DC fuses:	Positive:	2.5A	Negative:	N/A	
AC Current at 115 VAC:	Quiescent:	0.52A	Max. Load:	1.55A	
AC fuse:	2A				
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.