

PULSE GENERATOR
PERFORMANCE CHECK

Model: *AN-108B-3-B-P*

S.N.: *10411*

Date: *OCT 16 2002*

- a) Output signal amplitude:
0 TO +200 Amps
- b) Pulse width:
(0 TO +20 VOLTS)
10US TO 1ms
- c) Rise time:
(10% MAX DUTY CYCLE)
≤ 7 US
- d) Fall time:
≤ 7 US
- e) PRF:
0 TO 1 kHz
(10% MAX DUTY CYCLE)
- f) Jitter, stability:
OK
- g) Prime power:

Ⓐ 120/240V, 50-60Hz

*Ⓑ 0 TO +25 VDC,
20 Amp LAMP
POWER SUPPLY.*

[Signature]

10411

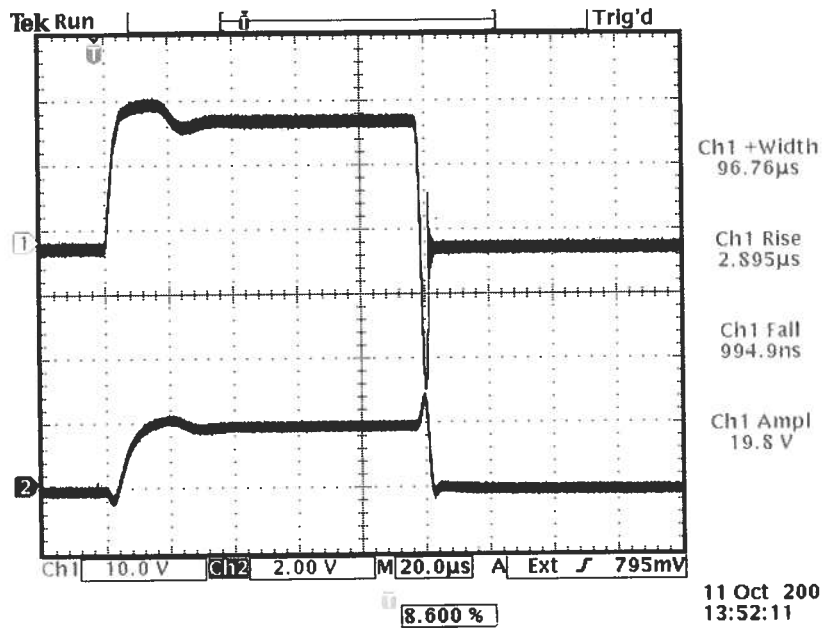
NARROW PULSE

$R_L \approx 0.1 \Omega$

PBF $\approx 0.1 \text{ K}\Omega$

LOAD
VOLTAGE

MONITOR
VOLTAGE



10411

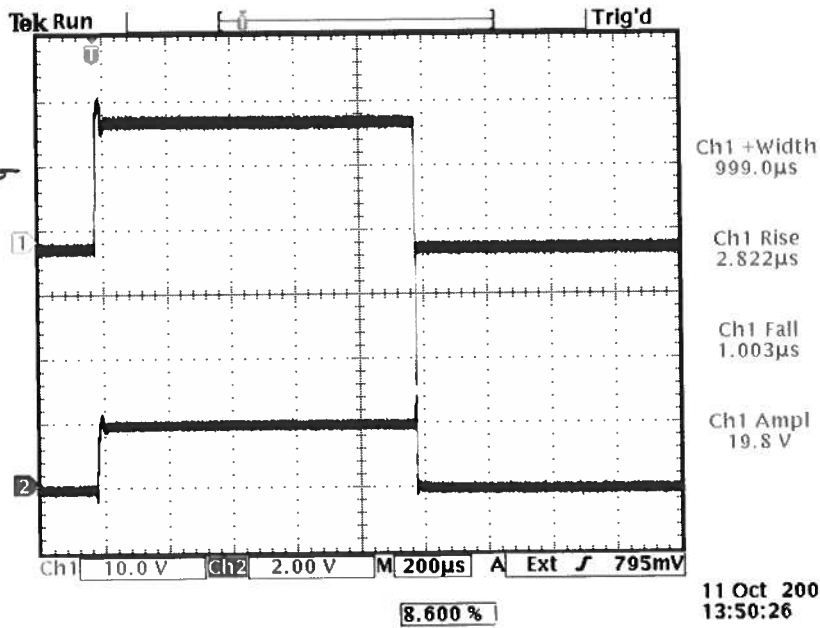
WIDE PULSER

$R_L = 0.1 \Omega$

PRF ≈ 10 Hz

LOAD
VOLTAGE

MONITOR
VOLTAGE





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"-B" Functional Test & Calibration Certificate

Date of test:	October 8, 2002				Tester:	MJC	
Programmed model name:	AV-108B-3-B-P						
Programmed serial number:	10411						
Firmware revision:	2.43						
Internal trigger checked at:	1 Hz	10 Hz	100 Hz	1 kHz			
Actual measured output ¹ :	1.002 Hz	10.02 Hz	100.1 Hz	1.004 kHz			
External trigger checked:	yes					Gate checked:	yes
Manual trigger checked:	yes						
Pulse compression checked:	yes	Low Amplitude PW Distortion Nulled:			yes		
Pulse width checked at:	10 us	100 us	1 ms	1 Hz, +200A to 0.106 Ohms			
Actual measured output ² :	10.0 us	97 us	1.001 ms				
PW _{in} = PW _{out} mode checked:	yes	DC mode checked:				N/A	
Duty Cycle Limit:	10%						
Delay nulled:	yes, at TTL trigger						
Delay checked at:	10 us	100 us	1 ms	at TTL trigger			
Actual measured output ¹ :	10.01 us	99.9 us	1.002 ms				
Double pulse checked:	N/A						
Invert mode checked:	N/A						
ECL/TTL modes checked:	N/A						
Zout switch checked:	N/A						
Amplitude checked at:	10A	50A	100A	200A	5 Hz, 100us, to 0.106 Ohms		
Actual measured output ² :	10.0A	50.4A	100A	201A			
Amplitude polarity:	+						
Zout calibration:	N/A						
Electronic amplitude control:	N/A						
External amplify mode:	N/A						
Bleeder resistors adequate:	yes (1k on cap bank)						
Ultravolt flux removed:	N/A						
Monitor V/I Ratio:	1V / 100A	Monitor offset nulled:				yes	
LCD Monitor calibrated:	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						
LCD pull-ups installed:	yes						
PN trigger pull-downs installed:	N/A						
PW stable during amplitude changes:	yes						
Sync pulse width checked:	200 ns nom						
Circuit Boards:	PS:	93	Main:	108E			
Overload Trigger Resistance:	Trips at:	N/A	Installed:	N/A			
DC fuses:	Positive:	N/A	Negative:	N/A			
AC Current at 115 VAC:	Quiescent:	0.54A	Max. Load:	0.59A			
AC fuse:	1A						
120/240V operation:	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 system (Cal. Label 112506) for PW < 5 ns.