

PULSE GENERATOR
PERFORMANCE CHECK

Model: *AN-106B -PN -M-B*

S.N.: *9381*

Date: *OCT 6 2000*

- a) Output signal amplitude:
0 TO ±100 AMP
(TO 0 TO ±100 VOLT)
- b) Pulse width:
2 TO 200 μS
(0.1% MAX DUTY CYCLE)
- c) Rise time:
< 1 μS
- d) Fall time:
≤ 1 μS
- e) PRF: *0 TO 100 Hz*
(0.1% MAX DUTY CYCLE)
- f) Jitter, stability:
OK
- g) Prime power:
120/240 V
50-60 Hz



(A)

9381

P_{out}

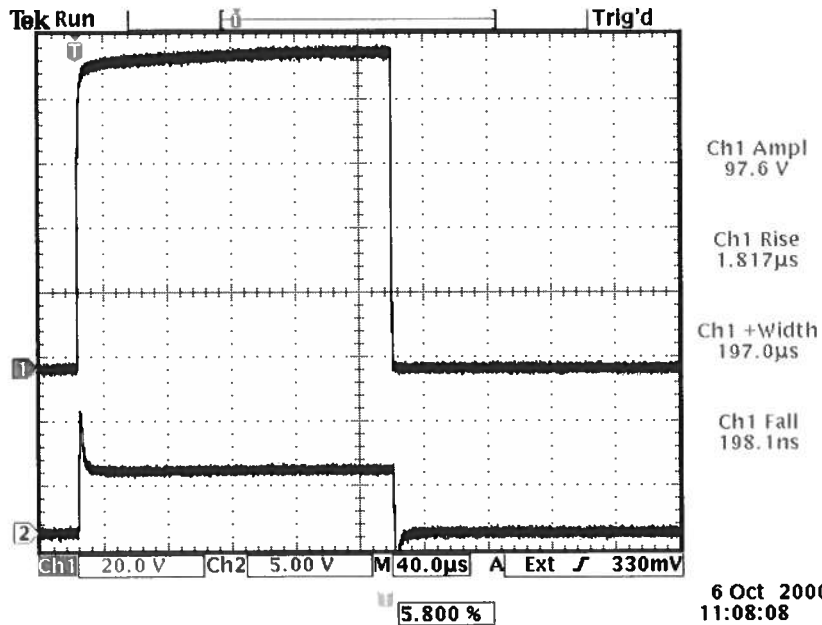
$P_{in} = 1a$

I_{out} norm in AX.

DUTY CYCLE norm in AX.

V_{LOAD}

V_{MOS}

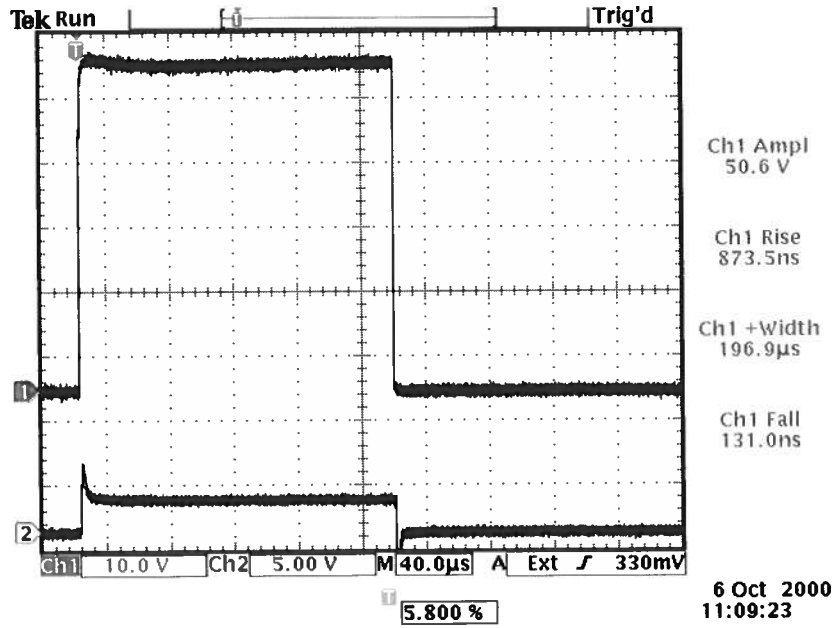


(B)

AS (A) BUT
I_{out} REDUCED
TO ≈ 50 AMPS

V_{LOAD}

V_{MON}



©

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N_{out}

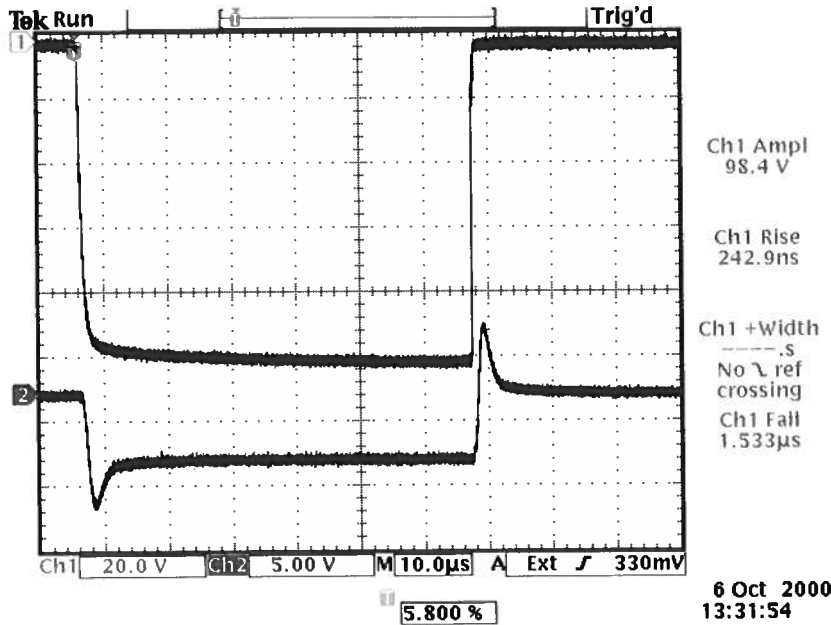
$R_c = 1 \Omega$

I_{out} NORM MAX

50% mA DUTY CYCLE

V_{LOAD}

V_{mos}



Ⓟ

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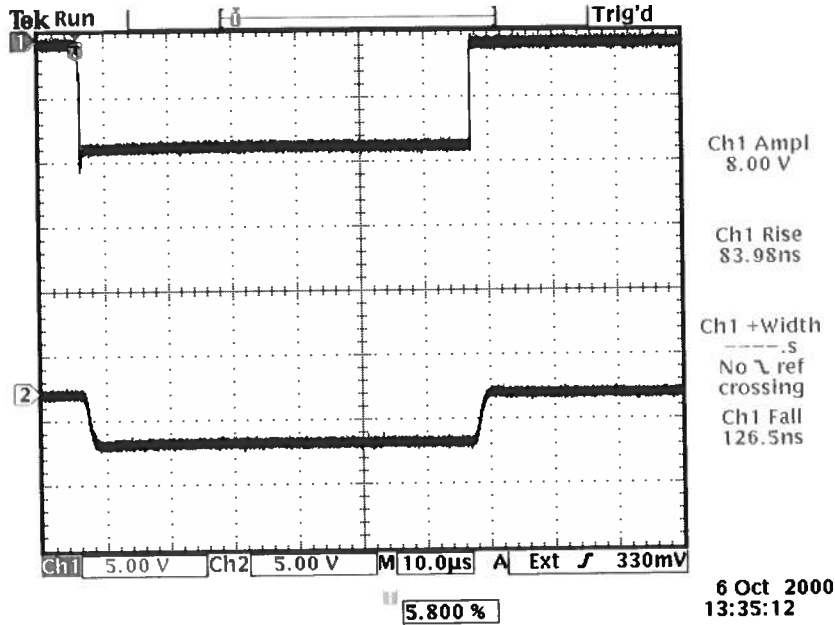
N out

$R_c = 1 \Omega$

$I_{out} \sim 8 \text{ Amps}$

V_{loop}

V_{non}





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"-B" Functional Test & Calibration Certificate

Date of test:	October 5, 2000				Tester:	MJC
Programmed model name:	AV-106B-B-M-PN					
Programmed serial number:	9381					
Firmware revision:	2.22					
Internal trigger checked at:	1 Hz	10 Hz	100 Hz			
Actual measured output ¹ :	0.998 Hz	9.98 Hz	99.8 Hz			
External trigger checked:	yes			Gate checked:	yes	
Trigger load resistor present:	yes					
Manual trigger checked:	yes					
Pulse compression checked:	yes					
Pulse width checked at:	2 us	20 us	200 us		1 Hz, -100A	
Actual measured output ² :	1.9 us	19.9 us	200.4 us		into 0.97 Ohm	
PWin = PWout mode checked:	yes			DC mode checked:	N/A	
Duty Cycle Limit:	0.1%					
Delay nulled:	N/A					
Delay checked at:	2 us	20 us	200 us		10 Hz, +100A,	
Actual measured output ¹ :	2.2 us	20.4 us	199 us		into 0.97 Ohm	
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	-100A	+10A	+100A	10 Hz, 100us,	
Actual measured output ² :	-10.2A	-100A	+9.9A	+101A	into 0.97 Ohm	
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:	5V full-scale			Monitor offset nulled:	yes	
LCD Monitor calibrated:	yes			Monitor offset nulled:	N/A	
Mon. Single Pulse/Min PW OK:	N/A			SHA Cap:	0	
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:	108		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	3k 10k		
DC fuses:	Positive:	0.5A	Negative:	N/A		
AC Current at 115 VAC:	Quiescent:	0.48A	Max. Load:	0.83A		
AC fuse:	1A					
Photographed:	yes					

¹ Checked with: Fluke PM6681 Counter, referenced to Datum ExacTime 9390-6000 GPS Frequency Reference

² Checked with: Tektronix TDS360 digital oscilloscope for PW ≥ 5 ns,
Tektronix 7704A/7S11/7T11/S4 sampling oscilloscope system for PW < 5 ns.