

PULSE GENERATOR
PERFORMANCE CHECK

Model: *AV02-B1-BP*

S.N.: *10409*

Date: *NOV 03 2002*

- a) Output signal amplitude:
0 TO +27 VOLTS TO
- b) Pulse width:
R_L ≥ 0.1Ω (200 MAX MA) (MAX)
100 NS TO 500 NS
- c) Rise time:
(0.25% MAX DUTY CYCLE)
≤ 100 NS
- d) Fall time:
≤ 50 NS
- e) PRF:
0 TO 20 KHz
(0.25% MAX DUTY CYCLE)
- f) Jitter, stability:
dL
- g) Prime power:
120/240 V
50-60 Hz



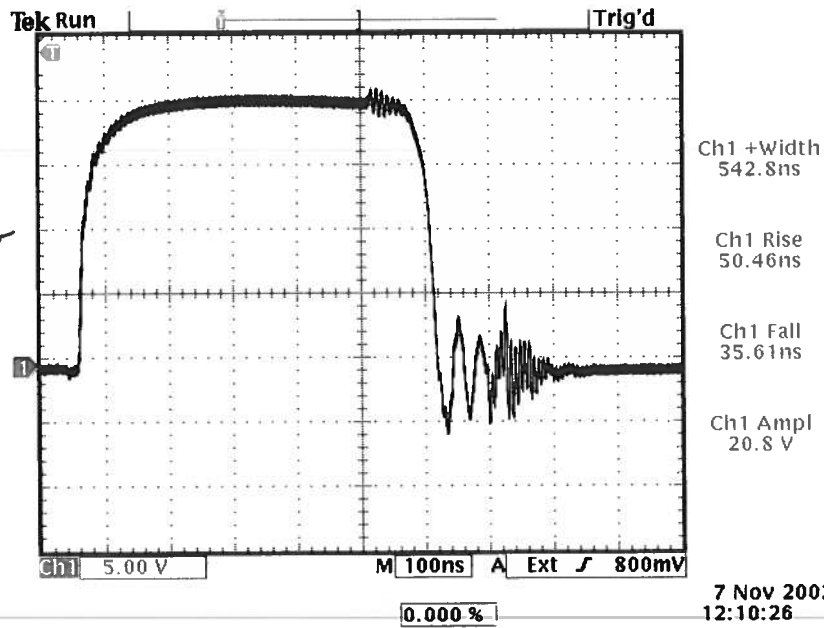
(A)

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$$R_L = 0.47 \Omega$$

$$I_p = 44.4 \text{ A}$$

LOAD
VOLTAGE



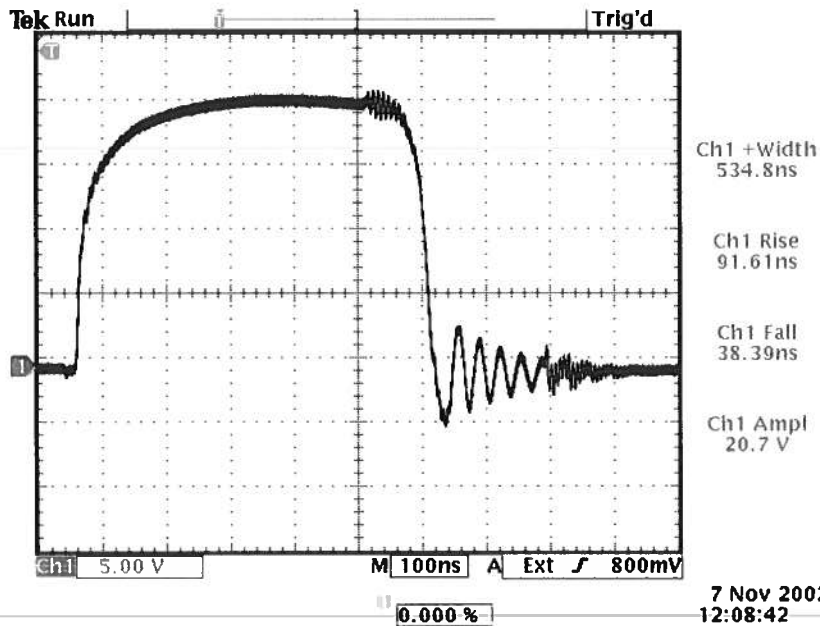
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$$R_L = 0.235 \Omega$$

$$I_p = 88 \text{ Amps}$$

LOAD
VOLTAGE



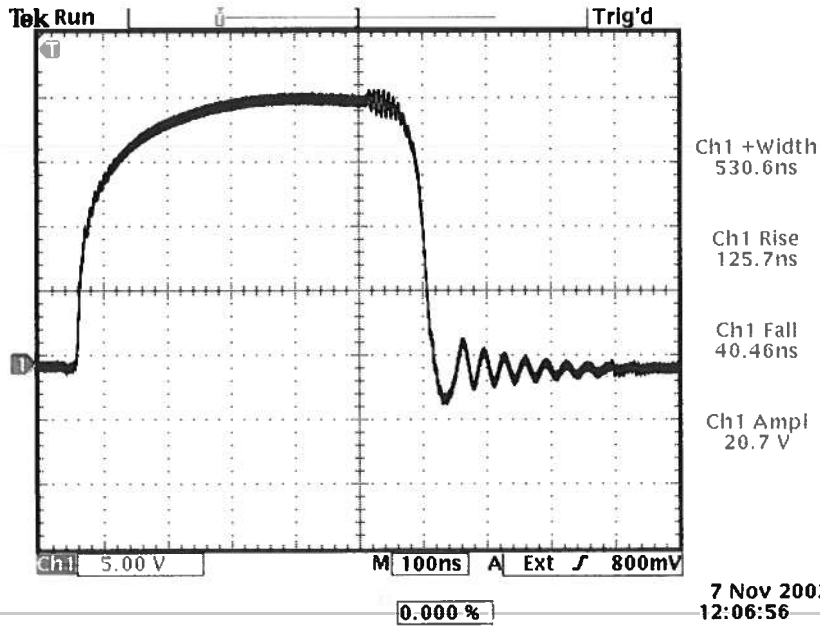
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$$R_L = 0.156$$

$$I_p = 133 \text{ Amps}$$

LOAD
VOLTAGE



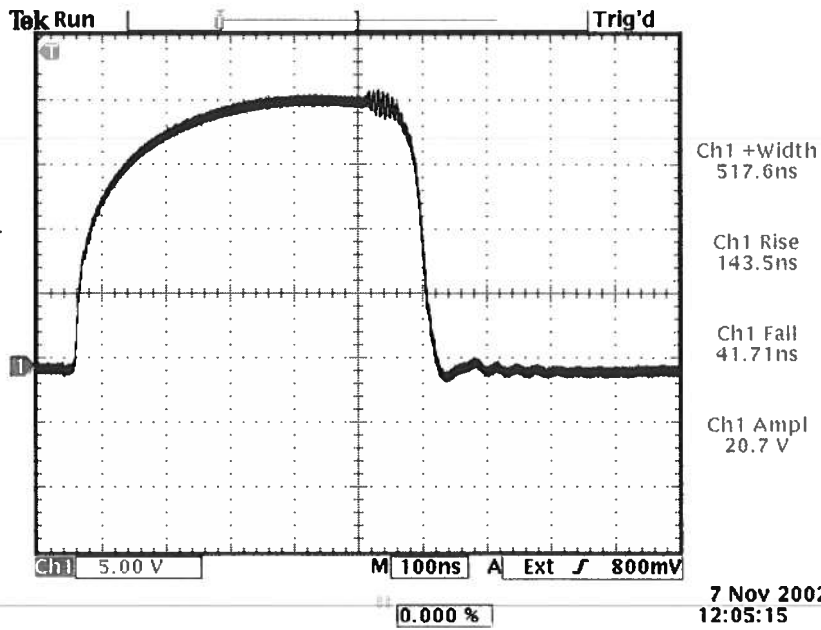
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$$R_c = 0.17 \Omega$$

$$I_p = 177 \text{ AMP}$$

LOAD
VOLTAGE



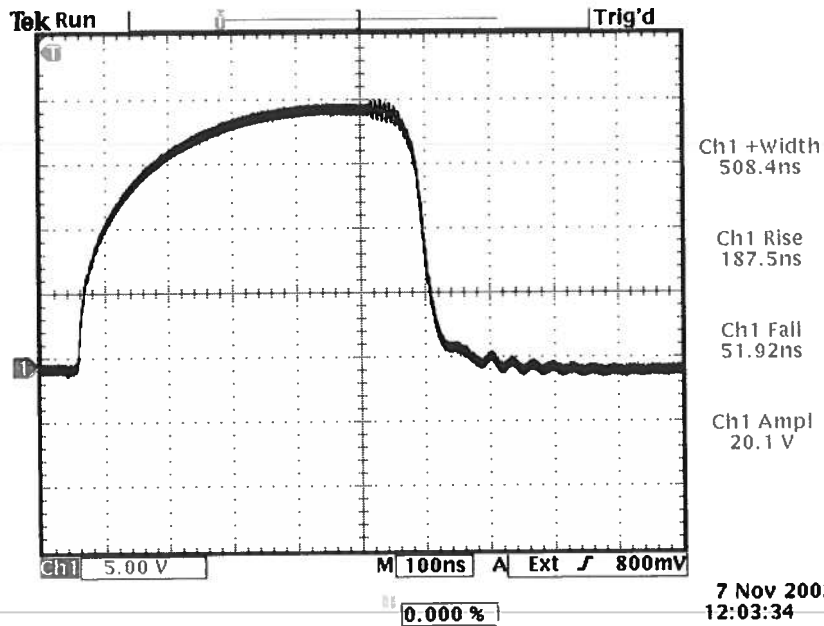
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$$R_c = 0.094 \Omega$$

$$I_p = 2.14 \text{ AMPS.}$$

LOAD
VOLTAGE.





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"-B" Functional Test & Calibration Certificate

Date of test:	November 7, 2002				Tester:	MJC
Programmed model name:	AVOZ-B1-B-P					
Programmed serial number:	10409					
Firmware revision:	2.44					
Internal trigger checked at:	2 Hz	20 Hz	200 Hz	2 kHz	20 kHz	
Actual measured output ¹ :	2.000 Hz	19.94 Hz	199.9 Hz	2.001 kHz	19.99 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:	100 ns	200 ns	500 ns		100 Hz, +27V	
Actual measured output ² :	95 ns	202 ns	490 ns		to 0.024 Ohms	
PW _{in} = PW _{out} mode checked:	N/A			DC mode checked:	N/A	
Duty Cycle Limit:	0.25%					
Delay nulled:	yes					
Delay checked at:	1 us				100 Hz, +27V	
Actual measured output ¹ :	1.07 us				to 0.024 Ohms	
Double pulse checked:	N/A					
Invert mode checked:	N/A					
ECL/TTL modes checked:	N/A					
Zout switch checked:	N/A					
Amplitude checked at:	+27V (set)				100 Hz, 500 ns	
Actual measured output ² :	+20.1V (load)				to 0.01 Ohms	
Amplitude polarity:	+					
Zout calibration:	N/A					
Electronic amplitude control:	N/A					
External amplify mode:	N/A					
Bleeder resistors adequate:	N/A					
Ultraviolet flux removed:	N/A					
Monitor V/I Ratio:	N/A			Monitor offset nulled:		
LCD Monitor calibrated:	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					
LCD pull-ups installed:	yes					
PN trigger pull-downs installed:	N/A					
PW stable during amplitude changes:	yes					
Sync pulse width checked:	yes, 200 ns nom					
Circuit Boards:	PS:	93	Main:	108E		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	6.2k		
DC fuses:	Positive:	0.75A	Negative:	0.5A		
AC Current at 115 VAC:	Quiescent:	0.41A	Max. Load:	0.61A		
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.