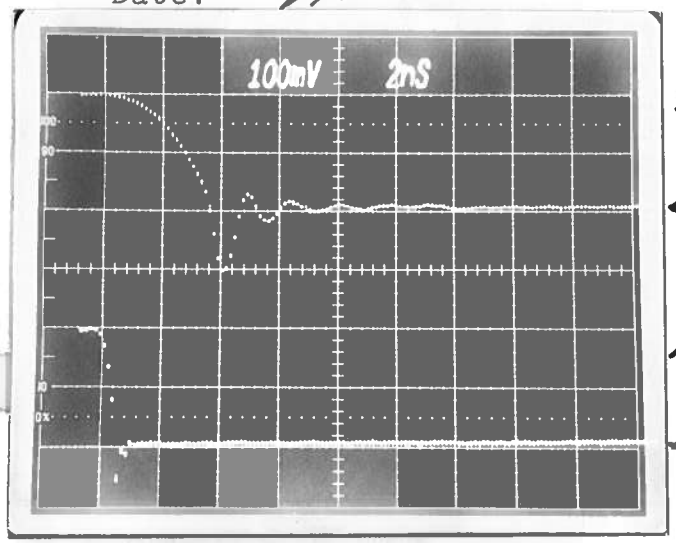
PULSE GENERATOR

PERFORMANCE CHECK

Model: AVRF-2-B.-PN-MSA1

S.N.: 10867

Date: APRIL 12 2004



2 NS/DIV

←0V

10NS/DIV

←0V

PG-P FALL TIME, 100 V/DIV

a) Output signal amplitude:
0 TO ±200 V (TO 50Ω)

b) Pulse width:
100 NS TO 5.0 uS

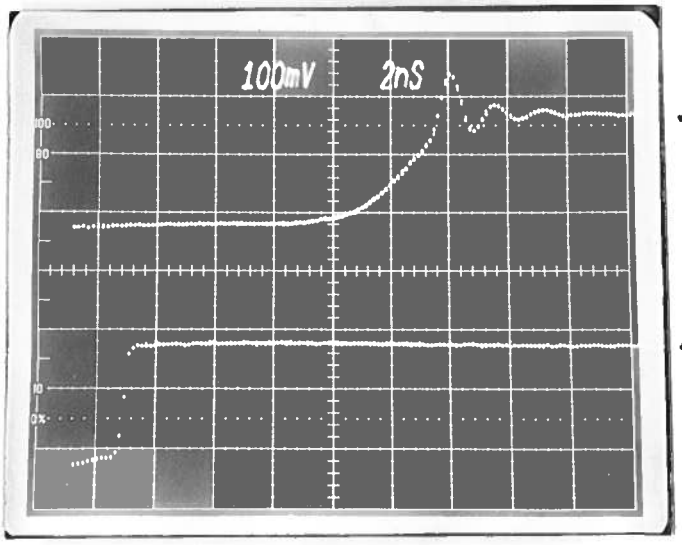
c) Rise time:
≤ 2 NS

d) Fall time:
≤ 2 NS

e) PRF:
0 TO 1 KHz

f) Jitter, stability:
OK

g) Prime power:
100 → 240 V
50-60 Hz.



←0V

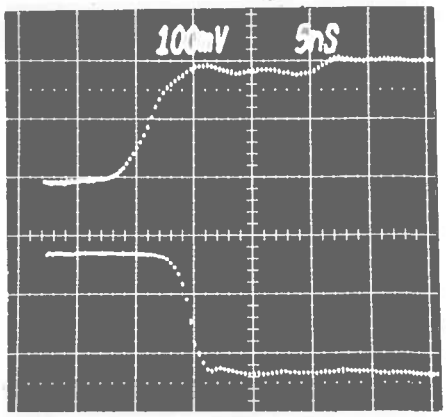
2NS/DIV

←0V

20NS/DIV

PG-N FALL TIME, 100 V/DIV

PRF = 1KHz



PG-P RISE TIME

PG-N RISE TIME

100 V/DIV

PRF = 1KHz

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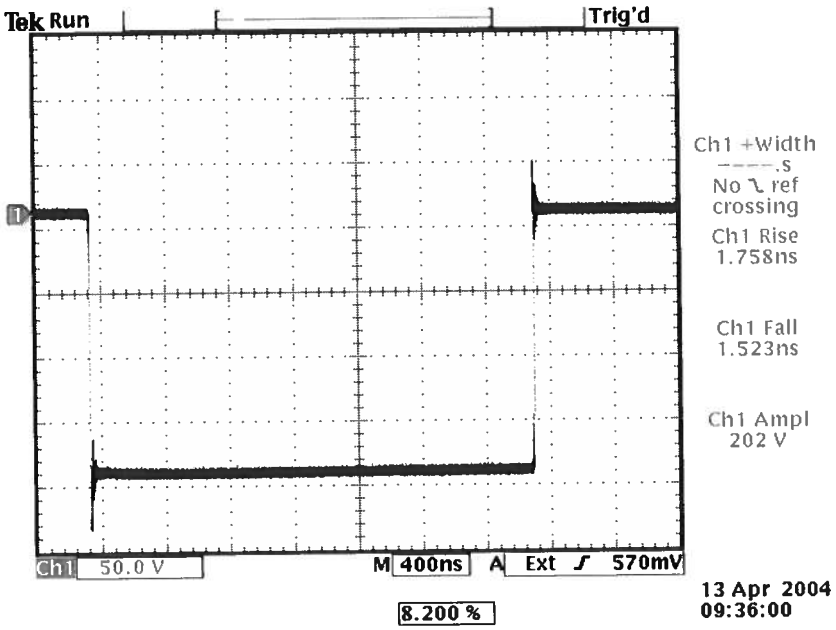
N_{OUT}

$R_L = 50\,\Omega$

300 MHz TEK SCOPE.



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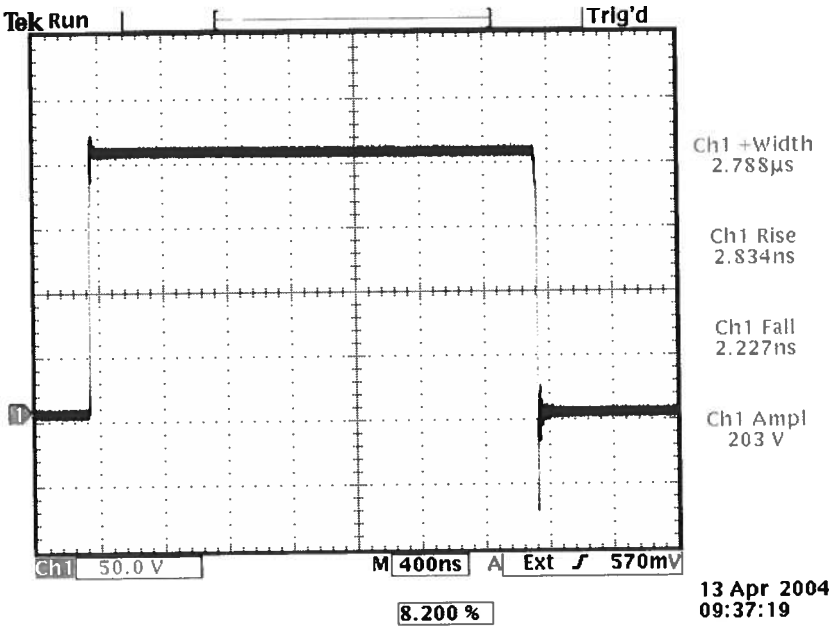
Pout

R_L = 50 Ω

300 MHz TEK SCOPE



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"-B" Functional Test & Calibration Certificate

Date of test:	April 13, 2004			Tester:	MJC
Programmed model name:	AVRF-2-B-PN-MSA1				
Programmed serial number:	10867				
Firmware revision:	2.57				
Internal trigger checked at:	1 Hz	10 Hz	100 Hz	1000 Hz	
Actual measured output[1]:	1.010 Hz	10.08 Hz	101.0 Hz	1007 Hz	
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	300 ns	1 us	5 us	100 Hz,
Actual measured output[2]:	98 ns	308 ns	1.01 us	4.98 us	+200V to 50Ω
PWin = PWout mode checked:	Yes			DC mode checked:	N/A
Duty Cycle Limit:	0.5%				
Delay nulled:	Yes				
Delay checked at:	100 ns	1 us	100 us	1 ms	100 Hz,
Actual measured output[1]:	101 ns	0.999 us	100.1 us	0.999 ms	+200V to 50Ω
Double pulse checked:	N/A				
Invert mode checked:	N/A				
ECL/TTL modes checked:	N/A				
Zout switch checked:	N/A				
Amplitude checked at:	-20V	+50V	-100V	+200V	100 Hz, 5 us,
Actual measured output[2]:	-20.1V	+49.6V	-99.6V	+199V	to 50Ω
Amplitude polarity:	+/-				
Zout calibration:	N/A				
Electronic amplitude control:	N/A				
External amplify mode:	N/A				
Bleeder resistors adequate:	Yes				
Burst mode:	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:	N/A (PCB 104C)				
PCB 108G/H resistor updates:	Yes				
PN trigger pull-downs installed:	Yes				
Sync pulse width checked:	100 ns nominal				
Circuit Boards:	PS:	158E	Main:	108H	
Overload Trigger Resistance:	Trips at:	N/A	Installed:	11k	
DC fuses:	Main:	2A	Overload:	0.8A	
AC Current:	Quiescent:	0.35A @ 115V 0.22A @ 230V	Max. Load:	0.46A @ 115V 0.26A @ 230V	
AC fuse:	0.8A (for 115V)				
1.5 kV RMS, 5 second Hypot Test:	OK				
25A RMS Ground Continuity Test:	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 (Cal. Label 112506) for PW < 5 ns.