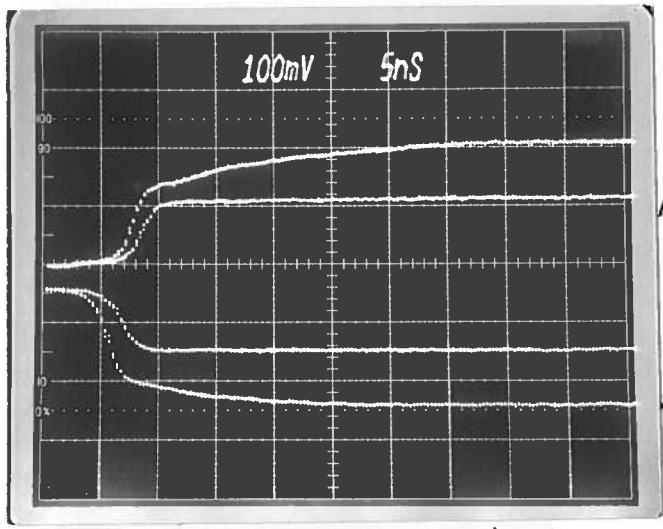


PULSE GENERATOR
PERFORMANCE CHECK

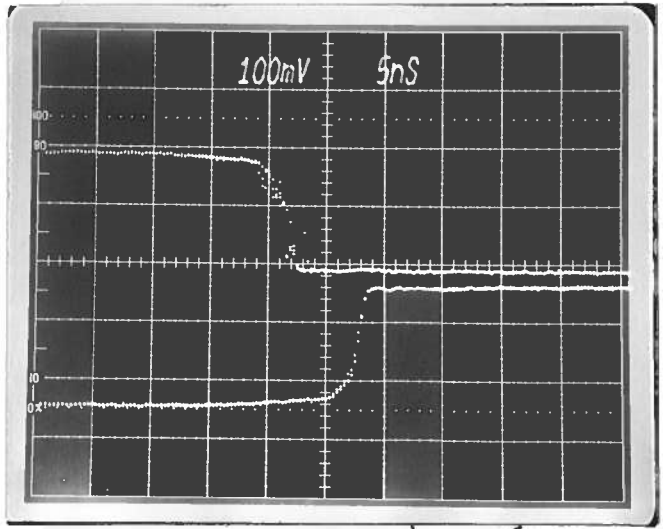
Model: *ANRF-2-B-AN-CA*

S.N.: *10412*

Date: *NOV 5 2002*



*RISE TIME, P(10%), N(90%)
100 V/DIV*



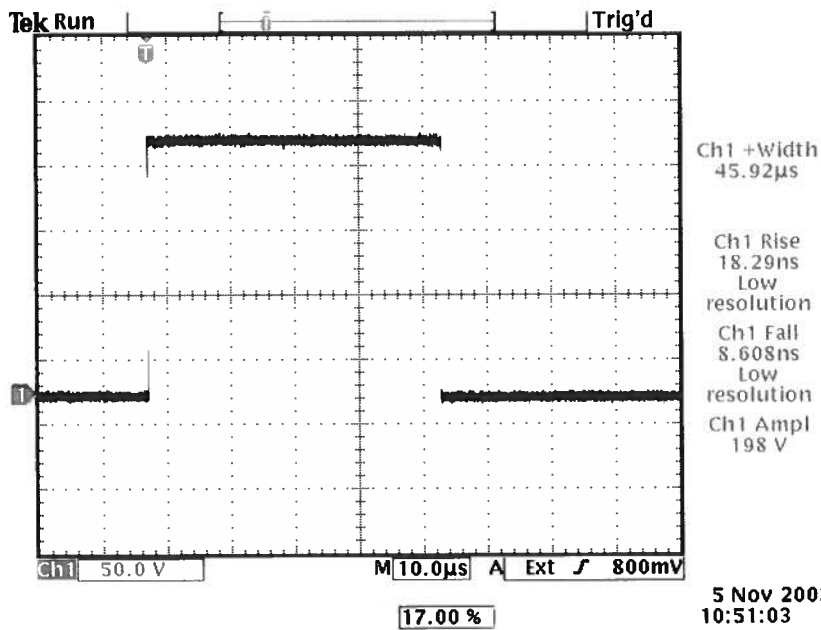
*FALL TIME, P(90%), N(10%)
100 V/DIV*

- a) Output signal amplitude:
*0 TO ± 200 VOLTS
(TO 50%)*
- b) Pulse width:
*0.1 TO 100μS
(0.5% MAX DUTY CYCLE)*
- c) Rise time:
≤ 2 NS
- d) Fall time:
≤ 2 NS
- e) PRF: *0 TO 1 KHz
(0.5% MAX DUTY CYCLE)*
- f) Jitter, stability:
OK
- g) Prime power:
*120 / 240 V
50-60 Hz.*

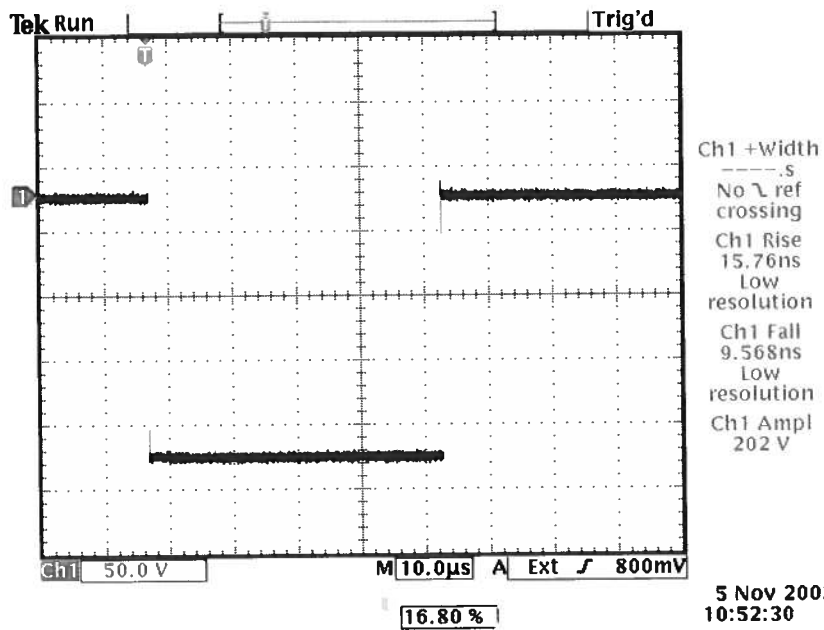
[Signature]

*↑
1 KHz PRF
60 dB ATTN.*

10412
WIDE PULSE
 $R_c = 50 \Omega$
POSITIVE



10412
WIDE PULSE
 $R_L = 50\Omega$
NEGATIVE



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 FAX: (613) 226-2802
"-B" Functional Test & Calibration Certificate

Date of test:	November 5, 2002				Tester:	MJC
Programmed model name:	AVRF-2-B-PN-EA					
Programmed serial number:	10412					
Firmware revision:	2.44					
Internal trigger checked at:	1 Hz	10 Hz	100 Hz	1 kHz		
Actual measured output ¹ :	0.997 Hz	9.97 Hz	99.7 Hz	0.998 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	1 us	10 us	100 us	10 Hz, +200V	
Actual measured output ² :	101 ns	1.01 us	10.02 us	100.2 us	to 50 Ohms	
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	10 us	100 us	10 Hz, +200V	
Actual measured output ¹ :	98.7 ns	1.002 us	10.00 us	100.2 us	to 50 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:	-20V	+20V	-200V	+200V	10 Hz, 100 us	
Actual measured output ² :	-19.8V	+19.9V	-200V	+201V	to 50 Ohms	
Amplitude polarity:	+/-					
Zout calibration:	N/A					
Electronic amplitude control:	OK					
External amplify mode:	N/A					
Bleeder resistors adequate:	yes					
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:	yes, added 1k on TRIG lines					
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:	10k		
DC fuses:	Positive:	0.75A	Negative:	N/A		
AC Current at 115 VAC:	Quiescent:	0.54A	Max. Load:	0.69A		
AC fuse:	0.5A (for 240V operation)					
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.