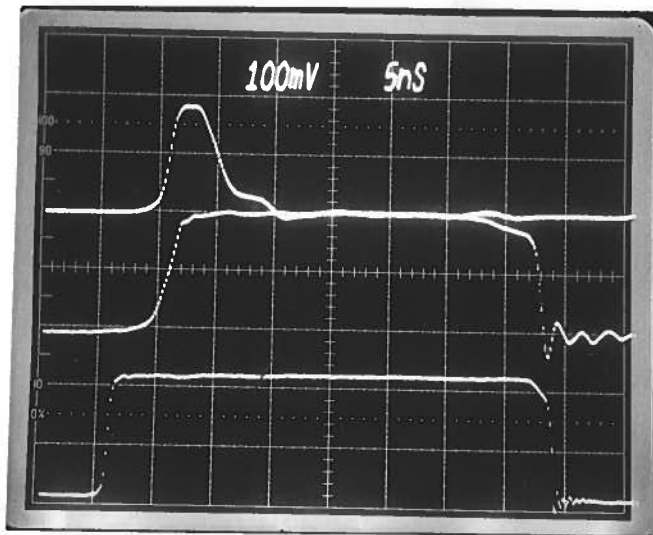


PULSE GENERATOR
PERFORMANCE CHECK

Model: *PIR-4-B-PN-05*

S.N.: *10553*

Date: *MAR 25 2003*



- a) Output signal amplitude: *0 TO ± 200V TO 50Ω*
- b) Pulse width: *2 TO 200 NS*
- c) Rise time:
2 - 10 NS : ≤ 1 NS
10 - 200 NS : ≤ 2 NS
- d) Fall time:
≤ 2 NS
- e) PRF: *0 TO 20 KHz.*
- f) Jitter, stability: *OK*
- g) Prime power: *120/240V*
50-60 Hz

60 dB ATTN.: 100V/DIV

TOP 5 NS/DIV

MID 5 NS/DIV

BOT 20 NS/DIV

PRF = 10 KHz

[Signature]



AVTECH ELECTROSYSTEMS LTD.
 NANOSECOND WAVEFORM ELECTRONICS
 SINCE 1975

P.O. BOX 265
 OGDENSBURG, NY
 U.S.A. 13669-0265
 TEL: (315) 472-5270
 FAX: (613) 226-2802

TEL: 1-800-265-6681
 FAX: 1-800-561-1970

e-mail: info@avtechpulse.com
 http://www.avtechpulse.com

BOX 5120, LCD MERIVALE
 OTTAWA, ONTARIO
 CANADA K2C 3H4
 TEL: (613) 226-5772
 FAX: (613) 226-2802

"-B" Functional Test & Calibration Certificate

Date of test:	March 24, 2003	Tester:	MJC
Programmed model name:	AVIR-4-B-OS-PN		
Programmed serial number:	10553		
Firmware revision:	2.46		
Internal trigger checked at:	2 Hz	20 Hz	200 Hz
Actual measured output ¹ :	1.99 Hz	19.9 Hz	199 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:	10 ns	50 ns	200 ns
Actual measured output ² :	9.7 ns	50.3 ns	200 ns
PWin = PWout mode checked:	N/A	DC mode checked:	N/A
Duty Cycle Limit:	N/A		
Delay nulled:	yes		
Delay checked at:	100 ns	200 ns	500 ns
Actual measured output ¹ :	100 ns	201 ns	505 ns
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
Actual measured output ² :	-19.7V	+49.8V	-99V
Amplitude polarity:	+/-		
Zout calibration:	N/A		
Electronic amplitude control:	N/A		
External amplify mode:	N/A		
Bleeder resistors adequate:	yes		
Ultravolt flux removed:	N/A		
Monitor V/I Ratio:	N/A	Monitor offset nulled:	
LCD Monitor calibrated:	N/A		
Offset checked at:	N/A	Amplitude-dependent offset nulled:	
Actual measured output ² :	N/A		
Offset nulled (output on):	N/A		
Offset nulled (output off):	N/A		
RS-232 checked:	yes		
LCD pull-ups installed:	yes		
PN trigger pull-downs installed:	yes		
PW stable during amplitude changes:	yes		
Sync pulse width checked:	200 ns		
Circuit Boards:	PS:	93	Main: 108E
Overload Trigger Resistance:	Trips at:	N/A	Installed: 13k
DC fuses:	Positive:	0.5A	Negative: N/A
AC Current:	Quiescent:	0.47A@115V 0.23A@230V	Max. Load: 0.54A@115V 0.27A@230V
AC fuse:	0.5A (for 230V)		
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.