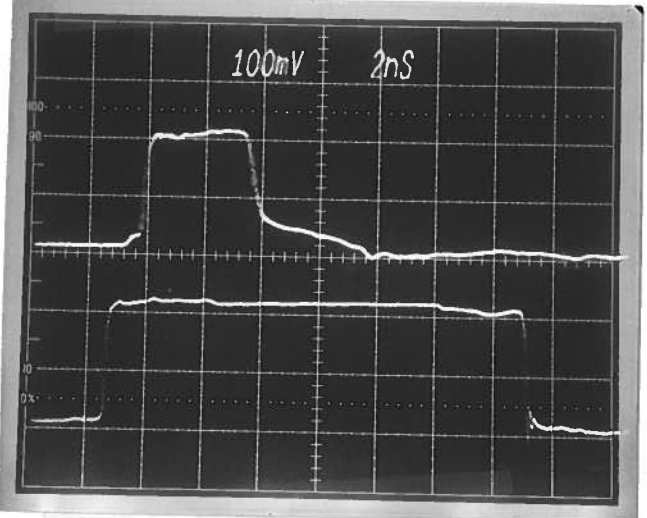


PULSE GENERATOR
PERFORMANCE CHECK

Model: *APP-2-B-PN*

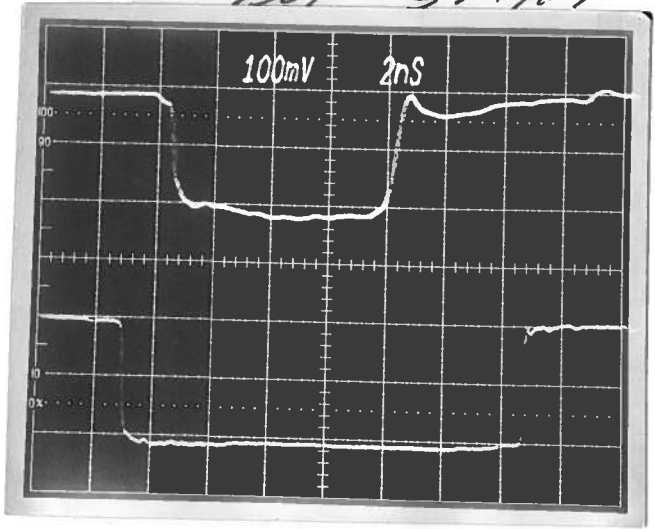
S.N.: *10361*

Date: *AUG 29 2002*



- a) Output signal amplitude:
0 TO ± 20 VOLTS TO 50 Ω
- b) Pulse width:
0.4 NS TO 100 NS
- c) Rise time:
≤ 200 ps
- d) Fall time:
≤ 300 ps
- e) PRF:
0 TO 100 KHz
- f) Jitter, stability:
OK
- g) Prime power:
120/240 V
50-60 Hz.

① *Fast. TOP 2 NS/DIV*
BOT 5 NS/DIV



② *Nout TOP: 2 NS/DIV*
BOT: 5 NS/DIV
40 dB ATTN: 10 VOLTS/DIV
100 KHz PRF

[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

P.O. BOX 5120 STN. F
 OTTAWA, ONTARIO
 CANADA K2C 3H4
 TEL: (613) 226-5772
 FAX: (613) 226-2802

"-B" Functional Test & Calibration Certificate

Date of test:	August 29, 2002				Tester:	MJC
Programmed model name:	AVPP-2-B-PN					
Programmed serial number:	10361					
Firmware revision:	2.41					
Internal trigger checked at:	1 Hz	100 Hz	1 kHz	10 kHz	100 kHz	
Actual measured output ¹ :	0.996 Hz	99.5 Hz	0.996 kHz	10.04 kHz	100.5 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:	1 ns	10 ns	50 ns	100 ns	10 kHz, +20V to 50 Ohms	
Actual measured output ² :	1.1 ns	11.5 ns	53 ns	102 ns		
PW _{in} = PW _{out} 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		10 kHz, +20V to 50 Ohms	
Actual measured output ¹ :	99.9 ns	201 ns	506 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:	+20 V, 6 ns	+20V, 60 ns	-20V, 6 ns	-20V, 60 ns	100 kHz, to 50 Ohms	
Actual measured output ² :	+20V	+20V	-20V	-20V		
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:	yes					
Sync pulse width checked:	200 ns nom					
Circuit Boards:	PS:	93	Main:	108E		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	N/A		
DC fuses:	Positive:	N/A	Negative:	N/A		
AC Current at 115 VAC:	Quiescent:	0.49A	Max. Load:	0.50A		
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.