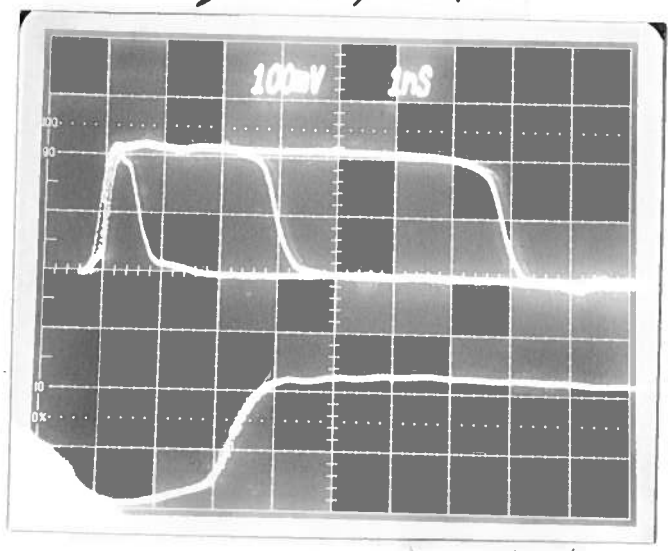


PULSE GENERATOR
PERFORMANCE CHECK

Model: *MUPP-2-B-P*

S.N.: *10893*

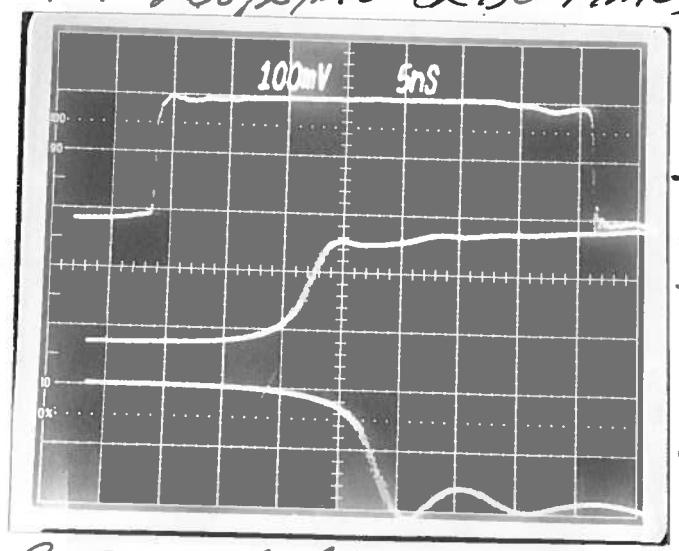
Date: *MAY 11 2004*



- a) Output signal amplitude:
0 TO + 20 VOLTS (TO 50m)
- b) Pulse width:
0.4 TO 100 NS
- c) Rise time:
≤ 200 ps
- d) Fall time:
≤ 300 ps
- e) PRF: *0 TO 100 KHz*

*0.4 TO 8 NS RANGE : 40 dB ATTN
-10 V/DIV*
TOP : 1 NS/DIV
BOT : 200 ps/DIV (RISE TIME)

- f) Jitter, stability:
OK
- g) Prime power:
*100 → 240 V
50-60 Hz*



- ← 5 NS/DIV*
- ← 200 ps/DIV (RISE TIME)*
- ← 200 ps/DIV (FALL TIME)*

8 TO 100 NS RANGE 10V/DIV
PRF = 100 KHz



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:	May 11, 2004				Tester:	MJC
Programmed model name:	AVPP-2-B-P					
Programmed serial number:	10893					
Firmware revision:	2.58					
Internal trigger checked at:	1 Hz	100 Hz	1 kHz	10 kHz	100 kHz	
Actual measured output ¹ :	1.000 Hz	99.73 Hz	0.997 kHz	9.977 kHz	99.8 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:	0.4 ns	2 ns	10 ns	100 ns	10 kHz, +20V to 50Ω	
Actual measured output ² :	0.35 ns	1.9 ns	10.2 ns	100 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	1 us	10 us	100 us	100 Hz, 100 ns, +20V	
Actual measured output ¹ :	101 ns	1.007 us	10.08 us	100.8 us		
Double pulse checked:	N/A					
Invert mode checked:	N/A					
ECL/TTL modes checked:	N/A					
Zout switch checked:	N/A					
Amplitude checked at:	7 ns, +5V	7 ns, +20V	100 ns, +5V	100 ns, +20V	10 kHz to 50Ω	
Actual measured output ² :	+4.9V	+20.1V	+4.9V	+20.0V		
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 108G/H resistor updates:	Yes					
PN trigger pull-downs installed:	N/A					
Sync pulse width checked:	100 ns nominal					
Circuit Boards:	PS:	158E	Main:	108H		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	N/A		
DC fuses:	Main:	1A	Overload:	N/A		
AC Current:	Quiescent:	0.22A @ 115V 0.16A @ 230V	Max. Load:	0.25A @ 115V 0.17A @ 230V		
AC fuse:	0.5A					
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.