

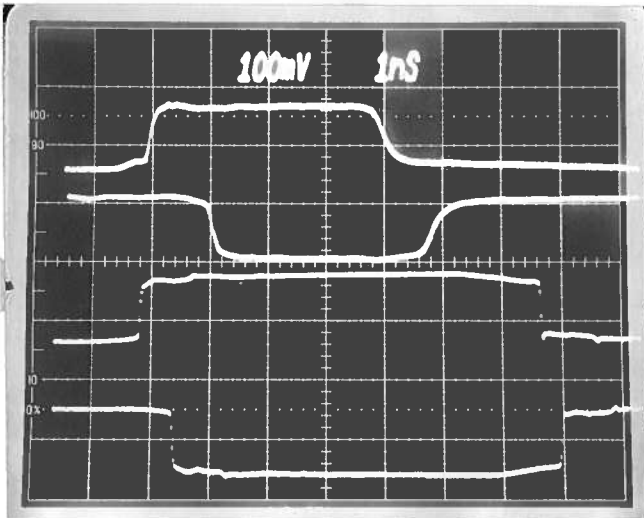
PULSE GENERATOR

PERFORMANCE CHECK

Model: *AVPP-1-B-DN-M-OT*

S.N.: *10940*

Date: *JUNE 24 2004*



- a) Output signal amplitude:  
*0 TO ± 10V (TO 50V)*
- b) Pulse width:  
*0.4 TO 100NS*
- c) Rise time:  
*≤ 200PS, FOR PW ≤ 5NS*
- d) Fall time:  
*≤ 100PS, FOR PW ≥ 5NS*  
*≤ 200PS FOR PW ≤ 5NS*  
*≤ 135PS FOR PW > 5NS*
- e) PRF:  
*0 TO 1 MHz*
- f) Jitter, stability:  
*OK*
- g) Prime power:  
*100 → 240V*  
*50-60 Hz.*

*40 dB ATTEN... 10 V/DIV*

- 1) 4 NS PW, 1 NS/DIV, +10V*
- 2) 4NS PW, 1 NS/DIV, -10V*
- 3) 35 NS PW, 5 NS/DIV, +10V*
- 4) 35 NS PW, 5NS/DIV, -10V*

*PRF = 100KHz*



# AVTECH ELECTROSYSTEMS LTD.

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## "-B" Functional Test & Calibration Certificate

Date of test:	June 24, 2004	Tester:	MJC		
Programmed model name:	AVPP-1-B-PN-M-OT				
Programmed serial number:	10940	MAC address:	N/A		
Firmware revision:	2.58				
Internal trigger checked at:	1 Hz	100 Hz	1 kHz	10 kHz	1 MHz
Actual measured output <sup>1</sup> :	0.996 Hz	99.2 Hz	0.995 kHz	9.98 kHz	1.002 MHz
External trigger checked:	Yes	Gate checked:		Yes	
Manual trigger checked:	Yes				
Pulse compression checked:	N/A	Low Amplitude PW Distortion Nulled:		N/A	
Pulse width checked at:	1 ns	5 ns	20 ns	100 ns	10 kHz, +10V to 50Ω
Actual measured output <sup>2</sup> :	0.95 ns	4.8 ns	19.8 ns	99.5 ns	
PWin = PWout mode checked:	N/A	DC mode checked:		N/A	
Duty Cycle Limit:	N/A				
Delay nulled:	Yes (+10V, 100 ns out)				
Delay checked at:	100 ns	1 us	10 us	100 us	100Hz, 100ns, +10V to 50Ω
Actual measured output <sup>1</sup> :	101 ns	0.997 us	10.00 us	99.8 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:	-2V	+4V	-7V	+10V	10 kHz, 100 ns to 50Ω
Actual measured output <sup>2</sup> :	-1.9V	+4.0V	-7.1V	+10.0V	
Amplitude polarity:	+/-				
Zout calibration:	N/A				
Electronic amplitude control:	N/A				
External amplify mode:	N/A				
Bleeder resistors adequate:	N/A				
Burst mode:	N/A				
Monitor V/I Ratio:	N/A	Monitor offset nulled:			
LCD Monitor calibrated:	N/A				
Offset checked at:	-5V	0V	+5V	to 50Ω	
Actual measured output <sup>2</sup> :	-5.00V	-14 mV	+4.99V		
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:	Yes				
Sync pulse width checked:	100 ns nominal				
Circuit Boards:	PS:	158E	Main:	108H	
Overload Trigger Resistance:	Trips at:	N/A	Installed:	20k	
DC fuses:	Main:	1.6A	Overload:	0.5A	
AC Current:	Quiescent:	0.31A @ 115V	Max. Load:	0.35A @ 115V	
		0.20A @ 230V		0.21A @ 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				

<sup>1</sup> Checked with: Fluke PM6681 Counter (S/N 9446 066 81016), referenced to Datum ExacTime 9390-6000 (S/N 4461) GPS Frequency Reference

<sup>2</sup> 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.