



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/

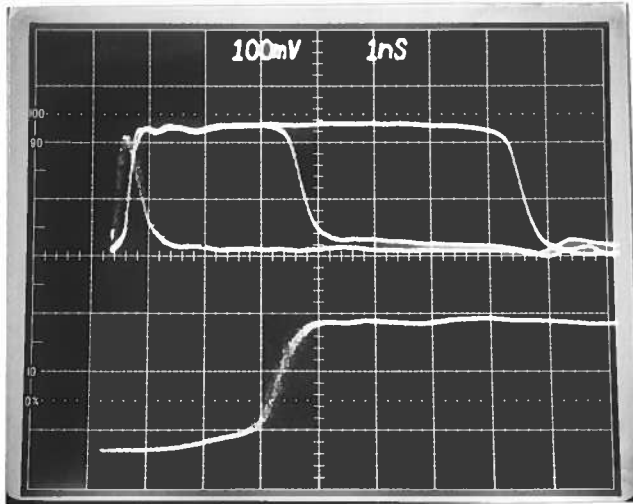
BOX 5120, LCD MERIVALE
OTTAWA, ONTARIO
CANADA K2C 3H4
TEL: (613) 226-5772
FAX: (613) 226-2802

PERFORMANCE CHECKSHEET

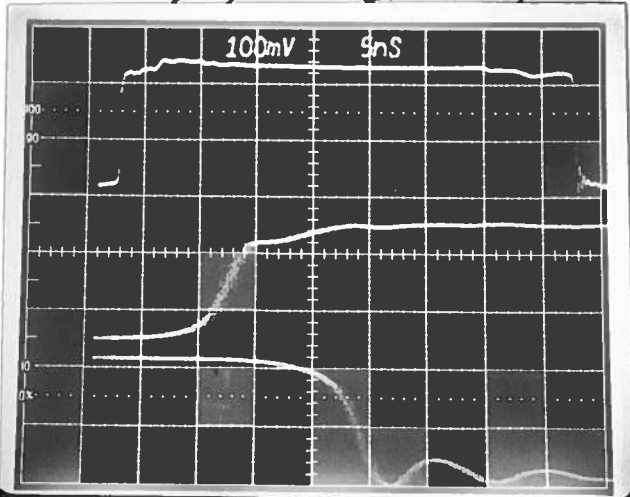
Model: *APP-2-B-P-EA-M-TNT*

S.N.: *11040*

Date: *NOV 8 2004*



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



8 TO 100 NS RANGE 10V/DIV

PRF = 100 KHz

a) Output Signal Amplitude:

0 TO +20V (TO 50V)

b) Pulse Width:

0.4 TO 100 NS

c) Rise Time (20%-80%):

≤ 200 ps

d) Fall Time (80%-20%):

≤ 300 ps

e) PRF:

0 TO 100 KHz

f) Jitter, Stability:

OK

← 5 NS/DIV

g) Prime Power:

100 → 240V

*← 200ps/DIV
(RISE TIME)*

50 - 60 KHz

*← 200ps/DIV
(FALL TIME)*



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:	November 8, 2004				Tester:	MJC
Programmed model name:	AVPP-2-B-P-EA-M-TNT					
Programmed serial number:	11040	MAC address:	00:90:c2:c4:3e:b8			
Firmware revision:	3.09					
Internal trigger checked at:	1 Hz	100 Hz	1 kHz	10 kHz	100 kHz	
Actual measured output ¹ :	1.016 Hz	101.3 Hz	1.013 kHz	10.13 kHz	101.2 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	5 ns	20 ns	100 ns	100 kHz, +20V	
Actual measured output ² :	0.4 ns	4.8 ns	20.2 ns	100 ns	to 50 Ohms	
PWin = PWout mode checked:	N/A				DC mode checked:	N/A
Duty Cycle Limit:	1%					
Delay nulled:	Yes					
Delay checked at:	100 ns	1 us	10 us	100 us	100 Hz, 100 ns,	
Actual measured output ¹ :	101 ns	1.000 us	10.00 us	99.9 us	+20V to 50Ω	
Double pulse checked:	N/A					
Invert mode checked:	N/A					
ECL/TTL modes checked:	N/A					
Zout switch checked:	N/A					
Amplitude checked at:	4 ns, +5V	4 ns, +20V	40 ns, +5V	40 ns, +20V	100 kHz, to 50	
Actual measured output ² :	+5.2V	+20.0V	+5.2V	+20.2V	Ohms	
Amplitude polarity:	+					
Zout calibration:	N/A					
Electronic amplitude control:	OK					
External amplify mode:	N/A					
Bleeder resistors adequate:	OK					
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				Telnet control checked:	Yes
LCD pull-ups installed:	N/A					
PCB 108H oscillator buffer resistor:	N/A					
PN trigger pull-downs installed:	N/A					
Sync pulse width checked:	100 ns nominal					
Circuit Boards:	PS:	158E	Main:	108M4		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	15k		
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} , 5s, switch on, 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.