



AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS
SINCE 1975

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

Model: *AVAMP-3-B-P-0T-EA-R5*

S.N.: *11161*

Date: *APRIL 07 2005*



40 dB ATTN, 10V/DIV

① *10 ns/DIV*

② *1 ns/DIV, RISE TIME*

③ *1 ns/DIV, FALL TIME*

PRF = 100 kHz

a) Output Signal Amplitude:

*0 TO +20 VOLTS
(TO 50Ω)*

b) Pulse Width(FWHM):

8 TO 100 ns

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

≤ 200 ps

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

≤ 300 ps

e) PRF:

0 TO 1 MHz

f) Jitter, Stability:

OK

g) Prime Power:

100 - 240 VOLTS

50 - 60 kHz

h) DC OFFSET: *0 TO ± 10 VOLTS*

200 mA (MAX)



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"-B" Functional Test & Calibration Certificate

Date of test:	April 7, 2005				Tester:	MJC
Programmed model name:	AVMP-3-B-P-OT-ELA-R5					
Programmed serial number:	11161	MAC address:	00:90:c2:c5:73:79			
Firmware revision:	3.23					
Internal trigger checked at:	1 Hz	1 kHz	10 kHz	100 kHz	1 MHz	
Actual measured output ¹ :	1.000 Hz	0.998 kHz	9.982 kHz	100.0 kHz	1.003 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:	8 ns	20 ns	50 ns	100 ns	100 kHz, +20V to 50 Ohms	
Actual measured output ² :	8.0 ns	19.8 ns	50.0 ns	101 ns		
PWIn = PWout mode checked:	N/A		DC mode checked: N/A			
Duty Cycle Limit:	10%					
Delay nulled:	Yes					
Delay checked at:	100 ns	1 us	10 us	100 us	100 Hz, +20V to 50 Ohms	
Actual measured output ¹ :	99.3 ns	1.002 us	10.00 us	100.1 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	+5V	+10V	+20V	300 kHz, 100 ns, to 50 Ohms	
Actual measured output ² :	+2.02V	+5.02V	+10.0V	+19.9V		
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:	-10V	-2V	+2V	+10V	Into 50 Ohms	
Actual measured output ² :	-10.0V	-2.01V	+2.02V	+10.1V		
Offset nulled (output on):	Yes			Amplitude-dependent offset nulled: N/A		
Offset nulled (output off):	Yes					
RS-232 checked:	Yes		Telnet control checked: N/A			
LCD pull-ups installed:	N/A					
PCB 108H oscillator buffer resistor:	N/A		PW, delay bias (1k/820/108H or 1k/604/108M): 1k/604/108M			
PRF/PW/Delay leakage current:	N/A					
PN trigger pull-downs installed:	N/A					
Sync pulse width checked:	100 ns nominal					
Circuit Boards:	PS:	158H	Main:	108M4		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	20k		
DC fuses:	Main:	1.6A	Overload:	0.5A		
AC Current:	Quiescent:	0.24A @ 115V	Max. Load:	0.35A @ 115V		
		0.17A @ 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					
Top cover vent required:	No					
Photographed:	Yes					

¹ Checked with: Fluke PM6681 Counter (S/N 9446 066 81016), referenced to Datum ExactTime 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.