



AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS
SINCE 1975

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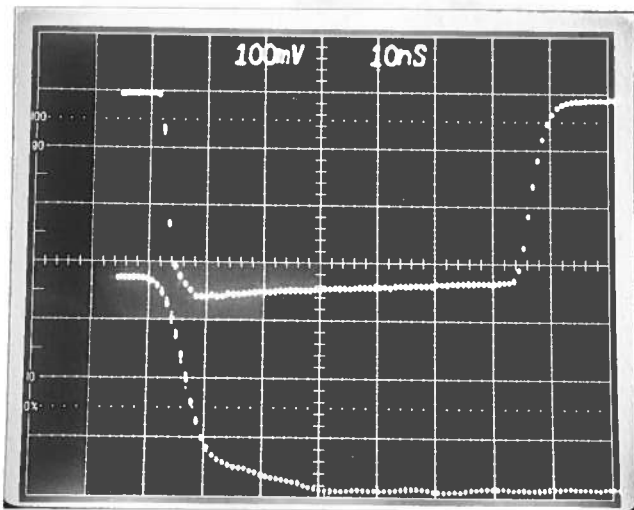
BOX 5120, LCD MERIVALE
OTTAWA, ONTARIO
CANADA K2C 3H4
TEL: (613) 226-5772
FAX: (613) 226-2802

PERFORMANCE CHECKSHEET

Model: *AVL-2-B-N*

S.N.: *11296*

Date: *OCT 3 2005*



60 dB ATTN.: 100V/DIV

① 10 ns/DIV

② 2 ns/DIV (RISE TIME)

PRF = 2 KHz.

a) Output Signal Amplitude:

0 to 320V (TO 50Ω)

b) Pulse Width(FWHM):

5 to 100 ns

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

≤ 2 ns

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

≤ 3 ns

e) PRF:

0 to 5 KHz

f) Jitter, Stability:

OK

g) Prime Power:

*100 - 240V
50 - 60Hz*



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"-B" Functional Test & Calibration Certificate

Date of test:	October 3, 2005				Tester:	MJC
Programmed model name:	AVL-2-B-N					
Programmed serial number:	11296	MAC address:	00:90:c2:c4:6b:ec			
Firmware revision:	3.32					
Internal trigger checked at:	5 Hz	50 Hz	500 Hz	5000 Hz		
Actual measured output ¹ :	5.015 Hz	50.12 Hz	502.0 Hz	5006 Hz		
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:	10 ns	25 ns	50 ns	100 ns	2 kHz, -320V to 50 Ohms	
Actual measured output ² :	9.3 ns	24 ns	49 ns	100 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	1 us	10 us	100 us		
Actual measured output ¹ :	102 ns	0.996 us	9.94 us	99.3 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:	-50V	-100V	-200V	-320V	2 kHz, 50 ns to 50 Ohms	
Actual measured output ² :	-49V	-99V	-200V	-320V		
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			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	
PCB 108N TP14/C26 resistor:	N/A					
PN trigger pull-downs installed:	N/A					
Sync pulse width checked:	100 ns nominal					
Circuit Boards:	PS:	158J	Main:	108M4		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	15k		
DC fuses:	Main:	1.6A	Overload:	0.5A		
AC Current:	Quiescent:	0.23A @ 115V 0.17A @ 230V	Max. Load:	0.30A @ 115V 0.20A @ 230V		
AC fuse:	0.5A					
1.5 kV _{RMS} , 5s, switch on, Hypot Test:	OK					
25A RMS Ground Continuity Test:	OKs					
Fan operational:	Yes					
Top cover vent required:	No					
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.