



AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS
SINCE 1975

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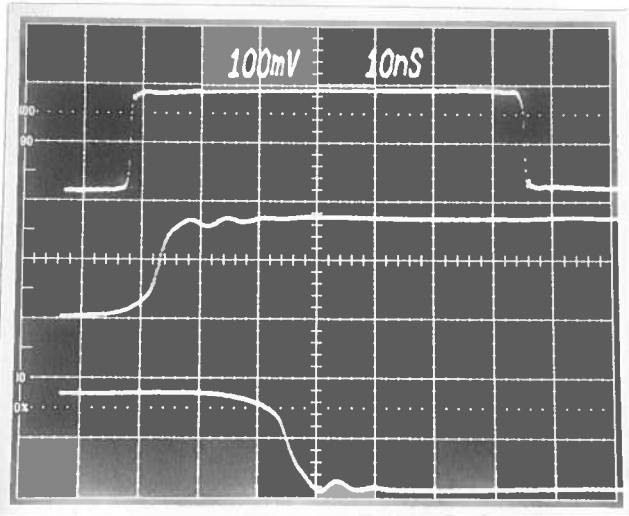
BOX 5120, LCD MERIVALE
OTTAWA, ONTARIO
CANADA K2C 3H4
TEL: (613) 226-5772
FAX: (613) 226-2802

PERFORMANCE CHECKSHEET

Model: *AVO-99-B-F-NAFB*

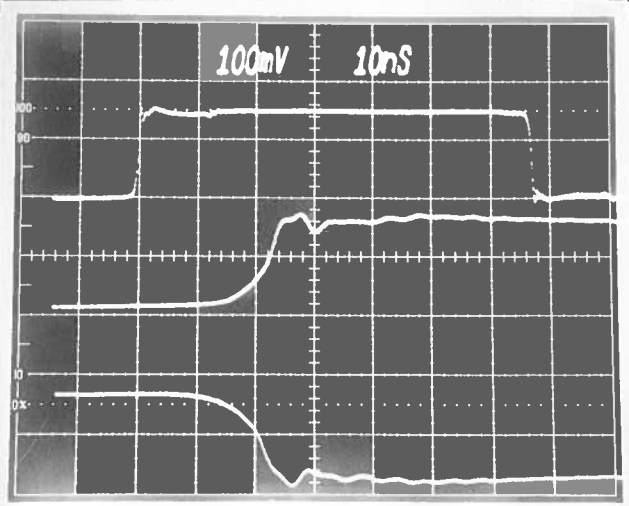
S.N.: *11173*

Date: *APRIL 26 2005*



- a) Output Signal Amplitude: *0 TO +1 AMP*
10 NS/DIV *(0 TO +53 V TO 50-Ω)*
- b) Pulse Width(FWHM): *20 TO 200 NS*
- c) Rise Time (20%-80%): *1 NS/DIV*
RISETIME *≤ 0.5 ns.*
- d) Fall Time (80%-20%): *1 NS/DIV*
FALLTIME *≤ 0.5 ns*
- e) PRF: *0 TO 100 KHz.*

Ⓐ *50 dB ATTN - 32 VOLTS/DIV*
MAINFRAME OUT TO 50-Ω, NO AUX-S1.



- f) Jitter, Stability: *10 NS/DIV* *OK*
- g) Prime Power: *100-240V*
50-60 Hz

Ⓑ *AS Ⓐ BUT AUX-S1 ATTACHED*
MG OUT TO 30dB
IN 459A DIODE AS TEST LOAD
PRF = 100 KHz



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"-B" Functional Test & Calibration Certificate

Date of test:	April 25, 2005				Tester:	MJC
Programmed model name:	AVO-9G-B-P-NUFB					
Programmed serial number:	11173	MAC address:	00:90:c2:c5:72:f6			
Firmware revision:	2.36					
Internal trigger checked at:	10 Hz	100 Hz	1 kHz	10 kHz	100 kHz	
Actual measured output ¹ :	10.00 Hz	99.98 Hz	1.000 kHz	10.01 kHz	100.1 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:	20 ns	50 ns	100 ns	200 ns	100 kHz, +50V to 50 Ohms	
Actual measured output ² :	19.9 ns	49.8 ns	101.3 ns	202 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	100 Hz, +50V to 50 Ohms	
Actual measured output ¹ :	100 ns	0.993 us	9.94 us	99.6 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:	+5V	+10V	+25V	+50V	100 kHz, 200 ns to 50 Ohms	
Actual measured output ² :	+4.96V	+10.04V	+25.1V	+49.8V		
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	
PRF/PW/Delay leakage current:	OK					
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:	8.2k		
DC fuses:	Main:	1.6A	Overload:	0.8A		
AC Current:	Quiescent:	0.25A @ 115V 0.18A @ 230V	Max. Load:	0.37A @ 115V 0.22A @ 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 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.