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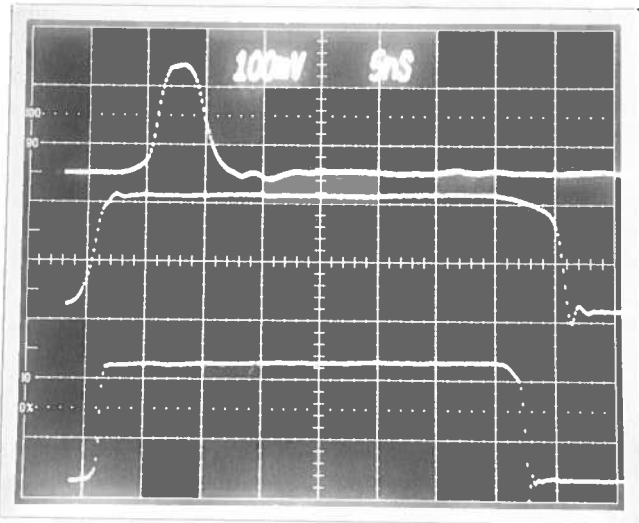
BOX 5120, LCD MERIVALE
 OTTAWA, ONTARIO
 CANADA K2C 3H4
 TEL: (613) 226-5772
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PERFORMANCE CHECKSHEET

Model: *AVIR-4-B-F*

S.N.: *11159*

Date: *APRIL 1 2005*



60dB ATTN.: 100V/DIV

① *5 NS/DIV*

② *5 NS/DIV*

③ *20 NS/DIV*

PRF = 10 KHz

a) Output Signal Amplitude:

0 TO +200V (TO 50m)

b) Pulse Width(FWHM):

2 TO 200 NS

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

2-10 NS: ≤ 1 NS

10-200 NS: ≤ 2 NS

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

≤ 2 NS

e) PRF:

0 TO 20 KHz

f) Jitter, Stability:

OK

g) Prime Power:

100 - 240V

50 - 60 Hz



AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS
SINCE 1975

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"-B" Functional Test & Calibration Certificate

Date of test:	April 1, 2005				Tester:	MJC
Programmed model name:	AVIR-4-B-P					
Programmed serial number:	11159	MAC address:	00:90:c2:c5:73:6a			
Firmware revision:	3.23					
Internal trigger checked at:	2 Hz	20 Hz	200 Hz	2 kHz	20 kHz	
Actual measured output ¹ :	2.016 Hz	20.15 Hz	201.6 Hz	2.004 kHz	19.97 kHz	
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:	5 ns	20 ns	50 ns	200 ns	10 kHz, +200V	
Actual measured output ² :	4.9 ns	19.3 ns	49.8 ns	201 ns	to 50 Ohms	
PWin = PWout 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	1 kHz, +200V,	
Actual measured output ¹ :	99.4 ns	0.995 us	9.96 us	99.6 us	200 ns 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:	8 ns, +50V	8 ns, +200V	200 ns, +50V	200 ns, +200V	10 kHz, 200 ns	
Actual measured output ² :	+49V	+200V	+51V	+201V	to 50Ω	
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:	7.5k		
DC fuses:	Main:	2.0A	Overload:	0.8A		
AC Current:	Quiescent:	0.36A @ 115V	Max. Load:	0.45A @ 115V		
		0.22A @ 230V		0.26A @ 230V		
AC fuse:	0.5A (for 240V operation)					
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.