



AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS
SINCE 1975

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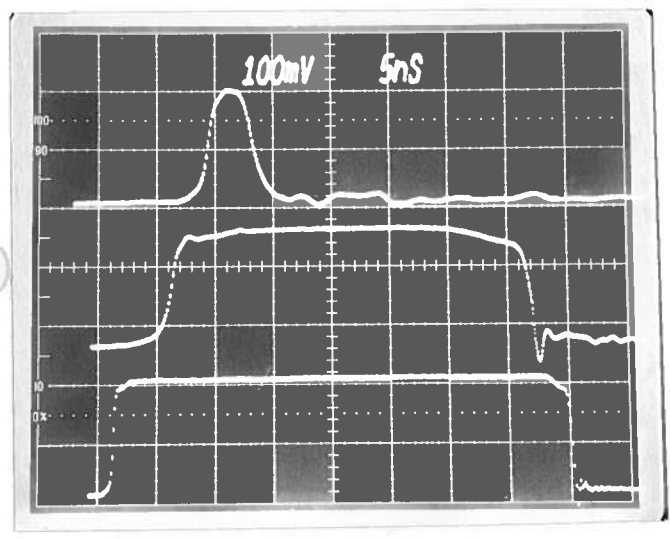
BOX 5120, LCD MERIVALE
OTTAWA, ONTARIO
CANADA K2C 3H4
TEL: (613) 226-5772
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PERFORMANCE CHECKSHEET

Model: *AVIR-4-B-PN-TNT-M-OS-R5*

S.N.: *11236*

Date: *AUG 11 2005*



60 dB 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 50Ω)
- b) Pulse Width(FWHM):
2 TO 200 NS
- c) Rise Time (20%-80%):
2-10 NS. ≤ 1 NS
- d) Fall Time (80%-20%):
10-200 NS ≤ 2 NS
- e) PRF:
0 TO 20 KHz

f) Jitter, Stability: *OK*

g) Prime Power:
100 - 240V
50 - 60 Hz



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"-B" Functional Test & Calibration Certificate

Date of test:	August 9, 2005				Tester:	MJC
Programmed model name:	AVIR-4-B-TNT-PN-OS-R5-M					
Programmed serial number:	11236	MAC address:	00:90:c2:c6:c6:bc			
Firmware revision:	3.31					
Internal trigger checked at:	2 Hz	20 Hz	200 Hz	2 kHz	20 kHz	
Actual measured output ¹ :	1.991 Hz	19.91 Hz	199.3 Hz	1.992 kHz	19.95 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	25 ns	50 ns	200 ns	10 kHz, +200V to 50 Ohms	
Actual measured output ² :	4.6 ns	24.7 ns	50.3 ns	199.7 ns		
PW _{in} = PW _{out} mode checked:	N/A		DC mode checked:			
Duty Cycle Limit:	N/A					
Delay nulled:	Yes					
Delay checked at:	100 ns	1 us	10 us	100 us	10 Hz, 200 ns, +200V to 50Ω	
Actual measured output ¹ :	101 ns	0.998 us	9.98 us	99.8 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:	-20V	+50V	-100V	+200V	10 kHz, 200 ns to 50 Ohms	
Actual measured output ² :	-20.3V	+50.8V	-100V	+201V		
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:	Yes		
LCD pull-ups installed:	N/A					
PCB 108H oscillator buffer resistor:	N/A		PW, delay bias (1k/820/108H or 1k/604/108M):	N/A		
PRF/PW/Delay leakage current:	N/A					
PN trigger pull-downs installed:	N/A					
Sync pulse width checked:	100 ns					
Circuit Boards:	PS:	158H	Main:	108N		
Overload Trigger Resistance:	Trips at:	8.1k	Installed:	7.5k		
DC fuses:	Main:	2A	Overload:	0.8A		
AC Current:	Quiescent:	0.36A @ 115V 0.22A @ 230V	Max. Load:	0.44A @ 115V 0.25A @ 230V		
AC fuse:	0.5A (for 220V 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 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.