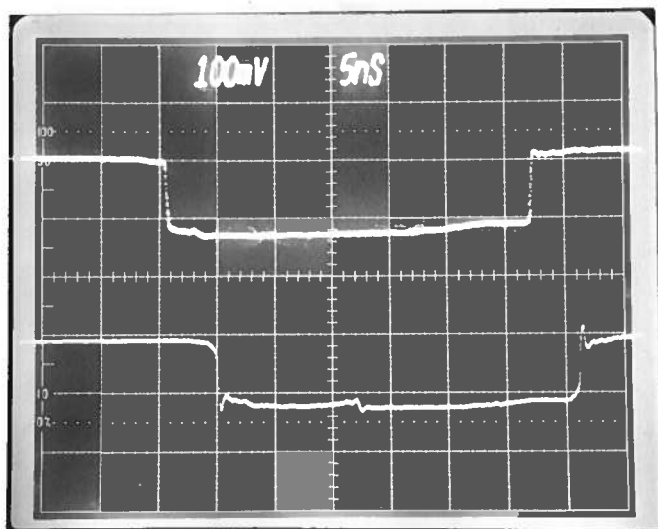


PULSE GENERATOR
PERFORMANCE CHECK

Model: *AVO-9B-B-N-P2-APGA*

S.N.: *10327*

Date: *AUG 13 2002*



a) Output signal amplitude:

0 TO -200 mA

b) Pulse width:

5 TO 100 NS

c) Rise time:

≤ 200 ps

d) Fall time:

≤ 200 ps

e) PRF:

0 TO 1 MHz

f) Jitter, stability:

OK

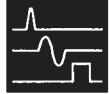
g) Prime power:

120/240 V

50-60 Hz

*TOP MANFRAME OUT TO
40 dB. NO MAX-S1
10 V/DIV, 5 NS/DIV*

*BOT AS TOP BUT MAX-S1
ATTACHED. ME OUT TO
20 dB. 1N459A USED
AS SIMULATED LOAD
PRF = 100 KHz.*

AVTECH**AVTECH ELECTROSYSTEMS LTD.**NANOSECOND WAVEFORM ELECTRONICS
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 TEL: (613) 226-5772
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"-B" Functional Test & Calibration Certificate

Date of test:	August 13, 2002				Tester:	MJC
Programmed model name:	AVO-9B-B-N-P2-APGA					
Programmed serial number:	10327					
Firmware revision:	2.41					
Internal trigger checked at:	1 Hz	100 Hz	1 kHz	10 kHz	1 MHz	
Actual measured output ¹ :	0.997 Hz	99.4 Hz	0.995 kHz	9.965 kHz	1.013 MHz	
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:	5 ns	10 ns	50 ns	100 ns	10 kHz, -10V	
Actual measured output ² :	5.2 ns	10.2 ns	51 ns	100 ns	to 50 Ohms	
PWin = PWout mode checked:	N/A	DC mode checked:			N/A	
Duty Cycle Limit:	10%					
Delay nulled:	yes					
Delay checked at:	100 ns	200 ns	500 ns	10 kHz, -10V		
Actual measured output ¹ :	99.1 ns	201 ns	506 ns	to 50 Ohms		
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	-12V	10 kHz, 100 ns	
Actual measured output ² :	-1.9V	-4.9V	-10.1V	-12.0V	to 50 Ohms	
Amplitude polarity:	-					
Zout calibration:	N/A					
Electronic amplitude control:	N/A					
External amplify mode:	N/A					
Bleeder resistors adequate:	N/A					
Ultravolt flux removed:	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					
LCD pull-ups installed:	yes					
Sync pulse width checked:	200 ns nom					
Circuit Boards:	PS:	93	Main:	108E		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	N/A		
DC fuses:	Positive:	N/A	Negative:	N/A		
AC Current at 115 VAC:	Quiescent:	0.35A	Max. Load:	0.4A		
AC fuse:	1A					
120/240V operation:	OK	Fan operational:			yes	
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 system (Cal. Label 112506) for PW < 5 ns.