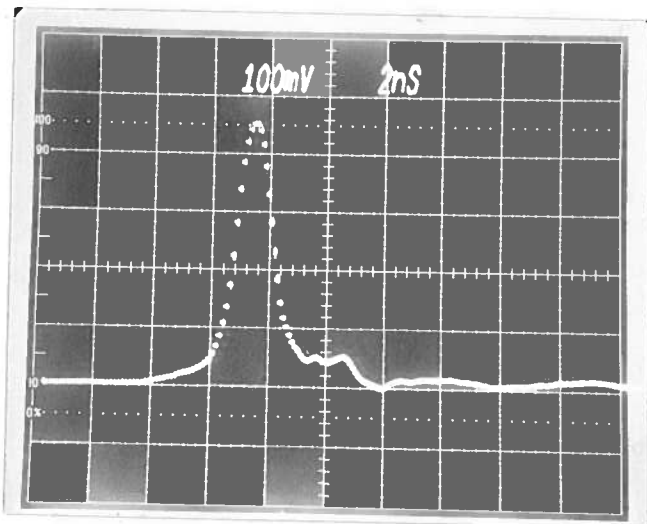


PULSE GENERATOR
PERFORMANCE CHECK

Model: *AVG-3B-B-PN-M-05*

S.N.: *10822*

Date: *JAN 30 2004*



- a) Output signal amplitude:
0 to ± 250 V (70 50 Ω)
- b) Pulse width:
≤ 2 ns (20% rise point)
- c) Rise time:
≤ 0.8 ns
- d) Fall time:
≤ 0.8 ns
- e) PRF: *0 to 20 kHz*
- f) Jitter, stability:
OK
- g) Prime power:

60 dB ATTN - 100 V/DIV
PRF = 10 kHz

100 → 250 V
50 - 60 MHz

AVTECH**AVTECH ELECTROSYSTEMS LTD.**NANOSECOND WAVEFORM ELECTRONICS
SINCE 1975

P.O. BOX 265
 OGDENSBURG, NY
 U.S.A. 13669-0265
 TEL: (315) 472-5270
 FAX: (613) 226-2802

TEL: 1-800-265-6681
 FAX: 1-800-561-1970

e-mail: info@avtechpulse.com
 http://www.avtechpulse.com/

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

"-B" Functional Test & Calibration Certificate

Date of test:	January 30, 2004					Tester:	MJC
Programmed model name:	AVG-3B-B-M-OS-PN						
Programmed serial number:	10822						
Firmware revision:	2.56						
Internal trigger checked at:	2 Hz	20 Hz	200 Hz	2 kHz	20 kHz		
Actual measured output ¹ :	1.993 Hz	19.88 Hz	198.6 Hz	2.003 kHz	19.98 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:	N/A						
Actual measured output ² :	N/A						
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,		
Actual measured output ¹ :	100.6 ns	0.996 us	9.98 us	99.7 us	+450V 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:	+100V	+200V	+350V	-450V	10 kHz to 50Ω		
Actual measured output ² :	+96V	--205V	+355V	-445V			
Amplitude polarity:	+/-						
Zout calibration:	N/A						
Electronic amplitude control:	N/A						
External amplify mode:	N/A						
Bleeder resistors adequate:	N/A						
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						
LCD pull-ups installed:	N/A (PCB 104C)						
PCB 108G/H resistor updates:	Yes						
PN trigger pull-downs installed:	N/A						
Sync pulse width checked:	200 ns nominal						
Circuit Boards:	PS:	158E	Main:	108G			
Overload Trigger Resistance:	Trips at:	25k	Installed:	20k			
DC fuses:	Positive:	1A, 0.5A	Negative:	N/A			
AC Current:	Quiescent:	0.24A @ 115V	Max. Load:	0.28A @ 115V			
		0.17A @ 230V		0.19A @ 230V			
AC fuse:	0.5A						
1.5 kV RMS, 5 second Hypot Test:	OK						
25A RMS Ground Continuity Test:	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 (Cal. Label 112506) for PW < 5 ns.

P:\b-calibration\sn10822,AVG-3B-B-M-OS-PN.sxw