



AVTECH ELECTROSYSTEMS LTD.

NANOSECOND WAVEFORM ELECTRONICS
SINCE 1975

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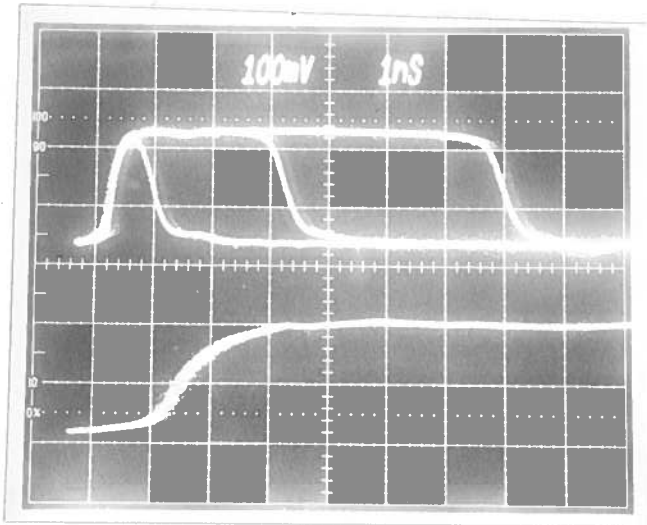
BOX 5120, LCD MERIVALE
OTTAWA, ONTARIO
CANADA K2C 3H4
TEL: (613) 226-5772
FAX: (613) 226-2802

PERFORMANCE CHECKSHEET

Model: *AVPP-2A-B-F*

S.N.: *11156*

Date: *MAR 29 2005*



*PW RANGE 0.6 TO 8.0 NS
40 DB ATTN, 10 V/DIV*

① *1 NS/DIV*

PW_{MIN}, PW₁₀, PW_{MAX}

② *200 ps/DIV*

RISE TIME

PRF = 100 KHz

a) Output Signal Amplitude:
0 TO +20 V (TO 50Ω)

b) Pulse Width(FWHM):
*0.6 NS TO 1.0 US
(5% MAX DUTY CYCLE)*

c) Rise Time (20%-80%):
≤ 250 ps

d) Fall Time (80%-20%):
≤ 350 ps

e) PRF:
*0 TO 100 KHz
(5% MAX DUTY CYCLE)*

f) Jitter, Stability:

OK

g) Prime Power:
*100-240 VOLTS
50-60 Hz*



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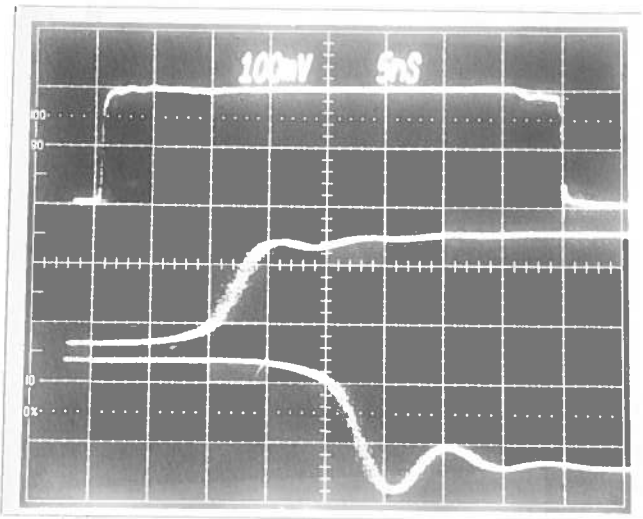
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PERFORMANCE CHECKSHEET

Model:

S.N.: 11156 CONT.

Date:



a) Output Signal Amplitude:

← ③

b) Pulse Width(FWHM):

← ④

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

← ⑤

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

e) PRF:

f) Jitter, Stability:

g) Prime Power:

PW RANGE 8 NS TO 1.0US
40 dB ATTEN, 10V / DIV

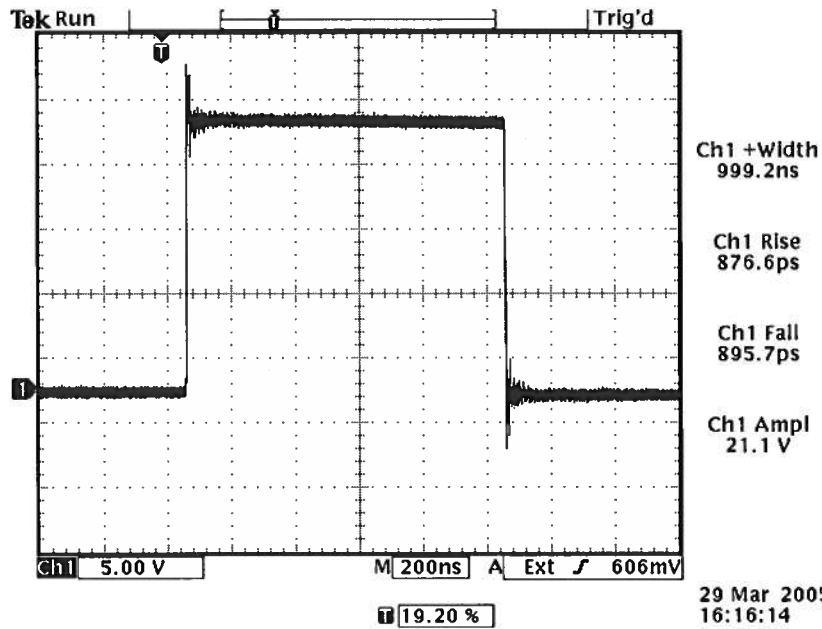
③ 5 NS / DIV

④ 200 ps / DIV, RISE TIME

⑤ 200 ps / DIV, FALL TIME

PRF = 100 KHz

11156



PW MAX, DUTY CYCLE MAX..

$R_L = 50 \Omega$

PRF = 50 KHz

TEK TDS 3032 300 MHz SCOPE



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"-B" Functional Test & Calibration Certificate

Date of test:	March 29, 2005				Tester:	MJC	
Programmed model name:	AVPP-2A-B-P						
Programmed serial number:	11156	MAC address:	00:90:c2:c6:b8:aa				
Firmware revision:	3.23						
Internal trigger checked at:	10 Hz	100 Hz	1 kHz	10 kHz	100 kHz		
Actual measured output ¹ :	10.05 Hz	100.5 Hz	1.004 kHz	10.05 kHz	100.6 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:	0.6 ns	10 ns	100 ns	1 us	10 kHz, +20V to		
Actual measured output ² :	0.62 ns	10.1 ns	99.2 ns	1.000 us	50 Ohms		
PW _{in} = PW _{out} mode checked:	OK		DC mode checked:				N/A
Duty Cycle Limit:	5%						
Delay nulled:	Yes						
Delay checked at:	100 ns	1 us	10 us	100 us	10 Hz, +20V, 1		
Actual measured output ¹ :	100.6 ns	0.996 us	9.96 us	99.6 us	us, 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:	4 ns, 5V	4 ns, 20V	200 ns, 5V	200 ns, 20V	10 kHz, to 50		
Actual measured output ² :	5.1V	20.1V	5.0V	20.4V	Ohms		
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		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:	12k			
DC fuses:	Main:	1.6A	Overload:	0.5A			
AC Current:	Quiescent:	0.31A @ 115V	Max. Load:	0.35A @ 115V			
		0.20A @ 230V		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.