

PULSE GENERATOR
PERFORMANCE CHECK

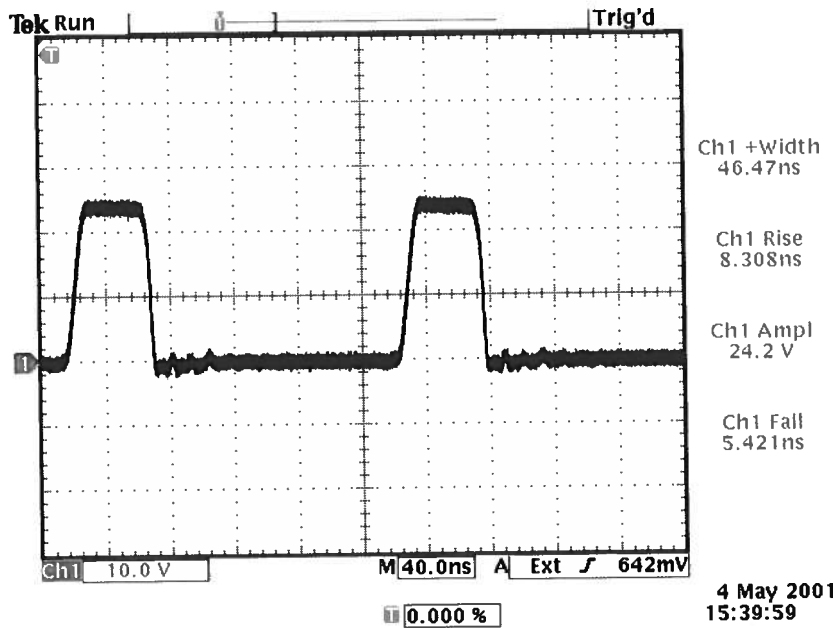
Model: *AV-1015-13*
S.N.: *9786*
Date: *MAY 4 2001*

- a) Output signal amplitude:
0 TO 150V (R_L ≥ 50Ω)
- b) Pulse width:
20NS TO 10 ms
- c) Rise time:
(25% MAX DUTY CYCLE)
≤ 10NS
- d) Fall time:
≤ 10NS
- e) PRF:
0 TO 10 MHz
(25% MAX DUTY CYCLE)
- f) Jitter, stability:
OK
- g) Prime power:
120/240V
50-60Hz



(A)

9786
P out
PRT = 5 MHz
 $R_{out} = 50 \Omega$
 $R_L = 50 \Omega$

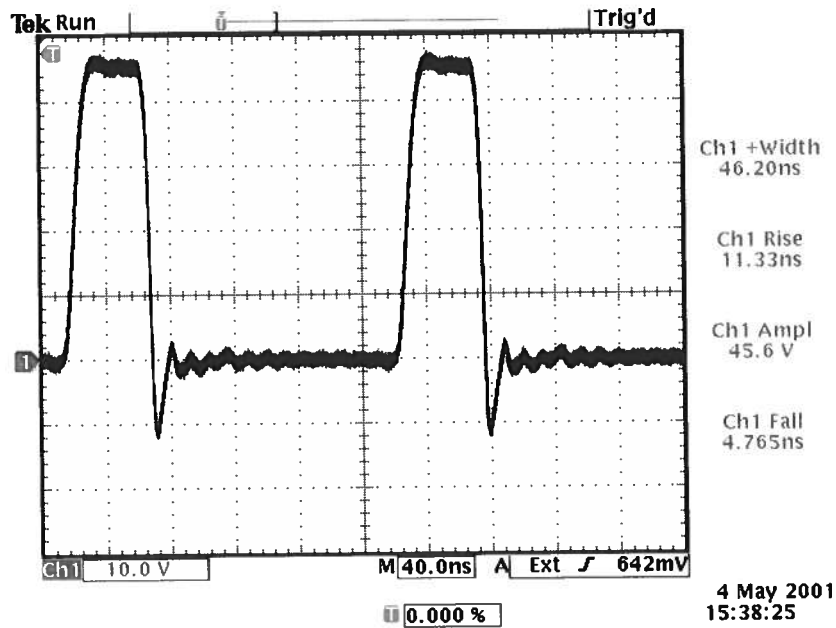


(B)

9786

AS (A) BUT

$R_{out} = 2 \Omega$



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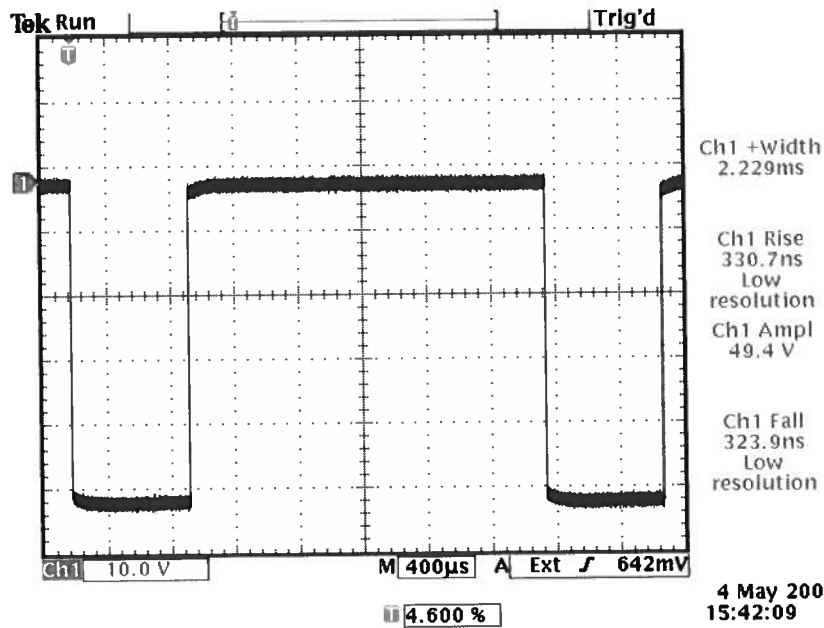
N OUT

DRTF \approx 330 Hz

WIDE PULSE

$R_{ant} = 2 \Omega$

$R_L = 50 \Omega$





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"-B" Functional Test & Calibration Certificate

Date of test:	May 4, 2001				Tester:	MJC
Programmed model name:	AV-1015-B-R5					
Programmed serial number:	9786					
Firmware revision:	2.24					
Internal trigger checked at:	1 Hz	100 Hz	10 kHz	1 MHz	10 MHz	
Actual measured output ¹ :	1.005 Hz	100.1 Hz	10.01 kHz	0.998 MHz	9.99 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:	20 ns	200 ns	2 us	2 ms	10 Hz, +50V to 50 Ohms	
Actual measured output ² :	19.9 ns	202.3 ns	2.01 us	2.01 ms		
PW _{in} = PW _{out} mode checked:	yes			DC mode checked:	N/A	
Duty Cycle Limit:	25%					
Delay nulled:	yes					
Delay checked at:	100 ns	1 us	10 us	1 ms	10 Hz, +50V to 50 Ohms	
Actual measured output ¹ :	100.3 ns	0.997 us	9.98 us	1.003 ms		
Double pulse checked:	yes					
Invert mode checked:	N/A					
ECL/TTL modes checked:	N/A					
Zout switch checked:	N/A					
Amplitude checked at:	-5V	+10V	-25V	+50V	100 Hz, 10 us, into 50 Ohms	
Actual measured output ² :	-4.92V	+9.92V	-25.0V	+50.2V		
Amplitude polarity:	+/-					
Zout calibration:	N/A					
Electronic amplitude control:	OK					
External amplify mode:	N/A					
Ultraviolet flux removed:	OK					
Monitor V/I Ratio:	N/A			Monitor offset nulled:		
LCD Monitor calibrated:	N/A			Monitor offset nulled:		
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					
Sync pulse width checked:	50 ns					
Circuit Boards:	PS:	93	Main:	108B		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	6k		
DC fuses:	Positive:	2A	Negative:	N/A		
AC Current at 115 VAC:	Quiescent:	0.45A	Max. Load:	0.72A		
AC fuse:	1A					
Photographed:	yes					

¹ Checked with: Fluke PM6681 Counter, referenced to Datum ExacTime 9390-6000 GPS Frequency Reference

² Checked with: Tektronix TDS3052 digital oscilloscope for PW ≥ 5 ns,
 Tektronix 7704A/7S11/7T11/S4 sampling oscilloscope system for PW < 5 ns.