

PULSE GENERATOR  
PERFORMANCE CHECK

Model:

AV-1011-B

S.N.:

9387

Date:

APRIL 18 2000

a) Output signal amplitude:

0 TO  $\pm 100$  V ( $R_L \geq 50\Omega$ )

b) Pulse width:

0.1  $\mu$ S TO 1. MS

c) Rise time:

(10% MAX DUTY CYCLE)

$\leq 10$  NS

d) Fall time:

$\leq 10$  NS

e) PRF:

0 TO 1.0 MHz

(10% MAX DUTY CYCLE)

f) Jitter, stability:

OK

g) Prime power:

120/240 V

50-60 Hz



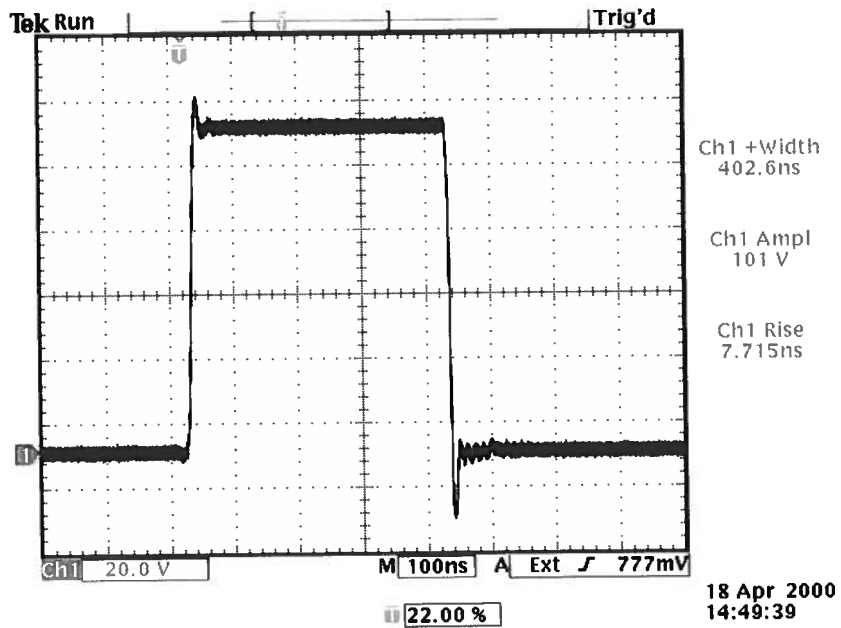
9387

$P_{RF} \approx 100 \text{ kW}$

$Z_{out} = 2 \Omega$

$R_L = 50 \Omega$

POS OUT



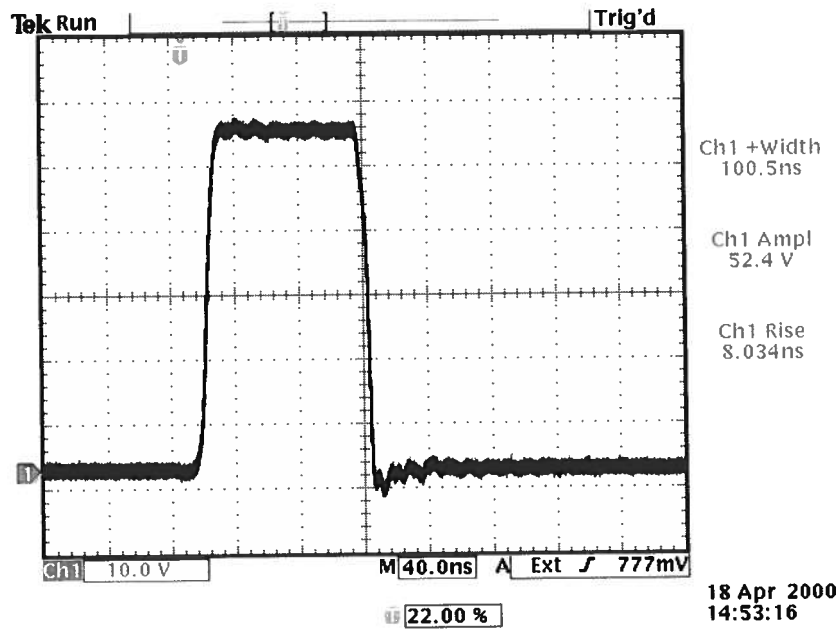
9387

$R_{HF} = 1.0 \text{ m}\Omega$

$Z_{out} = 50 \Omega$

$R_L = 50 \Omega$

POS OUT.



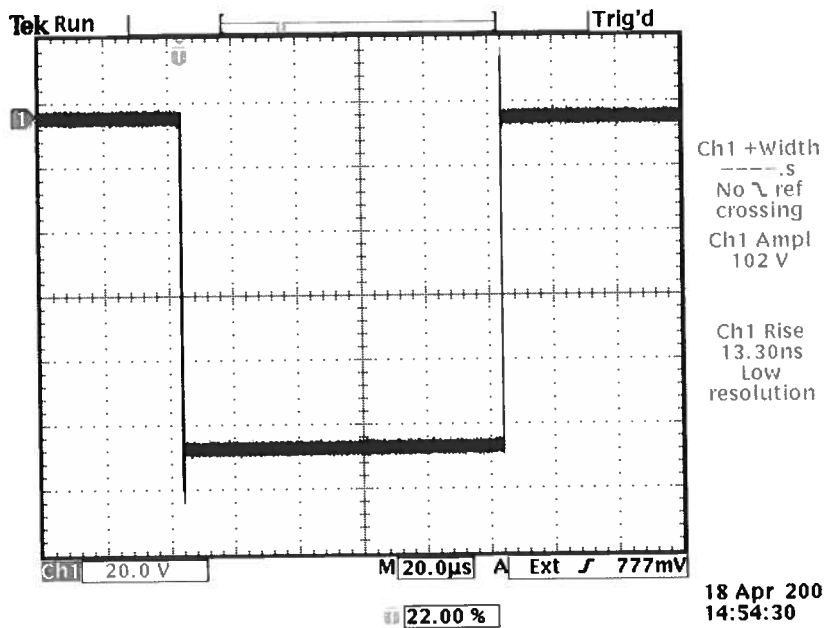
9387

$$R_{AT} = 100 \Omega$$

$$Z_{out} = 2 \Omega$$

$$R_c = 50 \Omega$$

NEG OUT.





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## "-B" Functional Test & Calibration Certificate

Date of test:	April 18, 2000				Tester:	MJC
Programmed model name:	AV-1011-B					
Programmed serial number:	9387					
Firmware revision:	2.11					
Internal trigger checked at:	0.1 Hz	100 Hz	10 kHz	1 MHz		
Actual measured output <sup>1</sup> :	0.0994 Hz	99.92 Hz	9.99 kHz	0.998 MHz		
External trigger checked:	yes				Gate checked:	yes
Trigger load resistor present:	yes					
Manual trigger checked:	yes					
Pulse compression checked:	yes					
Pulse width checked at:	100 ns	1 us	10 us	1 ms	10 Hz, +100V into 50 Ohms	
Actual measured output <sup>2</sup> :	99.5 ns	1.002 us	10.02 us	1.01 ms		
PWin = PWout mode checked:	yes				DC mode checked:	N/A
Duty Cycle Limit:	10%					
Delay nulled:	yes					
Delay checked at:	100 ns	1 us	10 us	1 ms	10 Hz, +100V, into 50 Ohms	
Actual measured output <sup>1</sup> :	100.0 ns	0.995 us	9.99 us	1.008 ms		
Double pulse checked:	yes					
Invert mode checked:	N/A					
ECL/TTL modes checked:	N/A					
Zout switch checked:	yes					
Amplitude checked at:	+20V	-20V	+100V	-100V	10 Hz, 100 us, into 50 Ohms	
Actual measured output <sup>2</sup> :	+20.0V	-20.0V	+100.0V	-100V		
Amplitude polarity:	+/-					
Zout calibration:	N/A					
Electronic amplitude control:	OK					
External amplify mode:	N/A					
Ultravolt flux removed:	OK					
Monitor V/I Ratio:	N/A			Monitor offset nulled:		
LCD Monitor calibrated:	N/A			Monitor offset nulled:		
Mon. Single Pulse/Min PW OK:	N/A			SHA Cap:		
Offset checked at:	N/A					
Actual measured output <sup>2</sup> :	N/A					
Offset nulled (output on):	N/A			Amplitude-dependent offset nulled:		
Offset nulled (output off):	N/A					
RS-232 checked:	OK					
Sync pulse width checked:	50 ns					
Circuit Boards:	PS:	93	Main:	108		
Overload Trigger Resistance:	Trips at:	N/A	Installed:	4k		
DC fuses:	Positive:	2A	Negative:	N/A		
AC Current at 115 VAC:	Quiescent:	0.41A	Max. Load:	0.85A		
AC fuse:	1A					
Photographed:	yes					

<sup>1</sup> Checked with: HP5370A Universal Time Interval Counter

<sup>2</sup> Checked with: Tektronix TDS360 digital oscilloscope for PW ≥ 5 ns,  
Tektronix 7704A/7S11/7T11/S4 sampling oscilloscope system for PW < 5 ns.