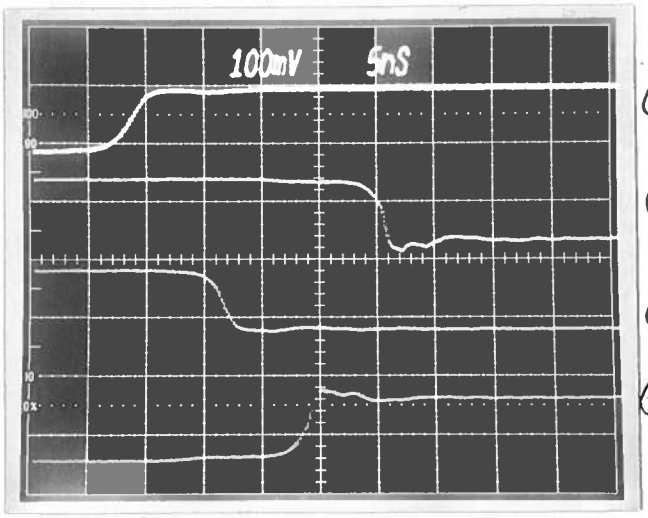
PULSE GENERATOR

PERFORMANCE CHECK

Model: AV-1011.81-B

S.N.: 10503

Date: FEB 25 2003




60 dB ATTN. ∴ 100 VOLTS/DIV

① a) Output signal amplitude: 0 TO ± 100 VOLTS (TO 50 Ω)

② b) Pulse width: 100 NS TO 1 mS (5% MAX DUTY CYCLE)

③ c) Rise time: ≤ 2 NS

④ d) Fall time: ≤ 2 NS

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

f) Jitter, stability: OK

g) Prime power: 120/240 V 50-60 Hz.

① POUT 5 NS/DIV, RISETIME (20-80%)

② POUT 5 NS/DIV, FALLTIME

③ NOUT 5 NS/DIV, RISE TIME)

④ NOUT 5 NS/DIV, FALL TIME

PRF = 10 KHz

PW ≈ 900 NS

(A)

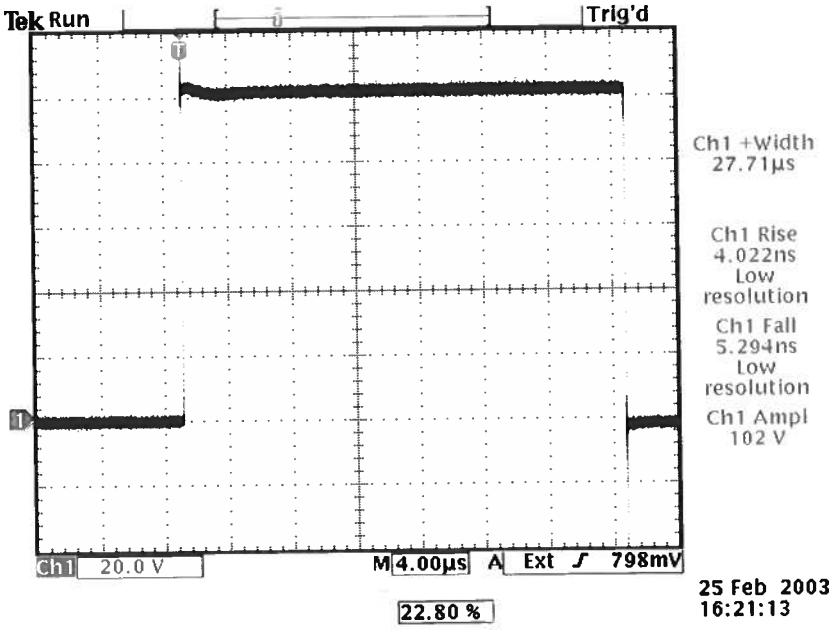
10503

WIDE PULSE

$R_L$ = 50Ω

PRF = 100 Hz

POSITIVE OUT



(B)

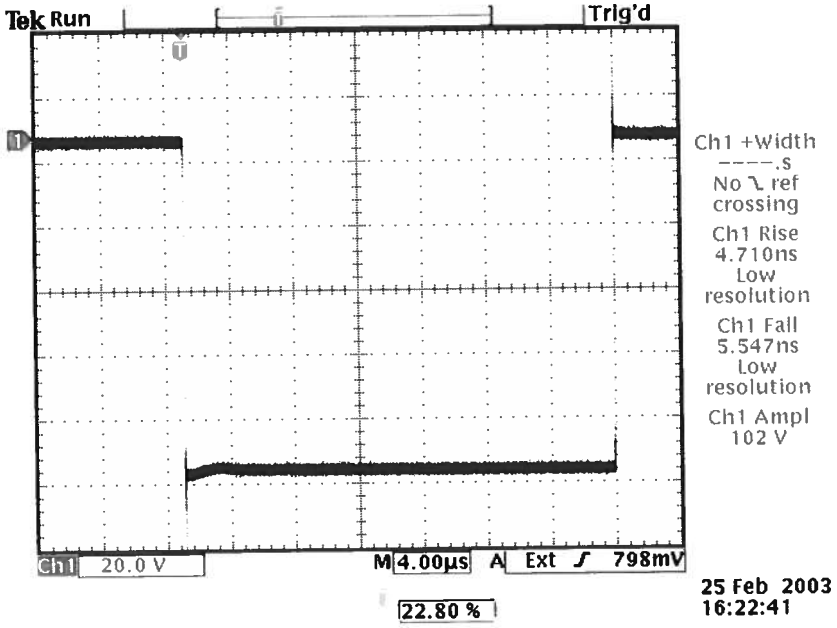
10503

WIDE PULSE

$R_L$ = 50Ω

PRF = 100 Hz

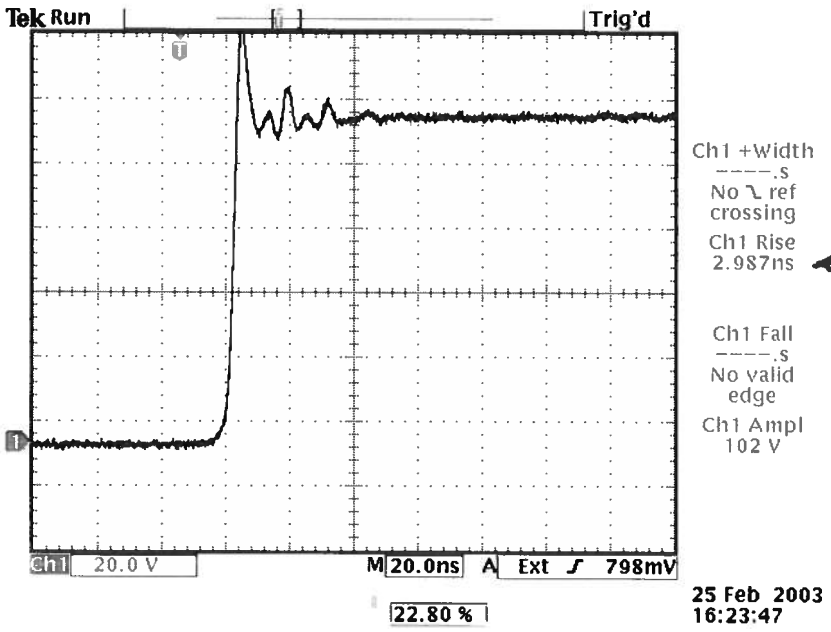
NEGATIVE OUT.



(C)

10503

VERY WIDE PULSE;
RISE TIME
$R_L$ = 50Ω
PW = 250US
POSITIVE OUT.




← LIMITED BY 300MHZ SCOPE.

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# "-B" Functional Test & Calibration Certificate

| | | | | | |
|---|---|---|---|---|---|
| Date of test: | February 25, 2003 | | | Tester: | MJC |
| Programmed model name: | AV-1011B1-B | | | | |
| Programmed serial number: | 10503 | | | | |
| Firmware revision: | 2.44 | | | | |
| Internal trigger checked at: | 1 Hz | 10 Hz | 1 kHz | 10 kHz | 100 kHz |
| Actual measured output[1]: | 1.001 Hz | 99.76 Hz | 0.998 kHz | 9.976 kHz | 99.75 kHz |
| 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: | 100 ns | 1 us | 10 us | 1 ms | 10 Hz, +100V |
| Actual measured output[2]: | 99.0 ns | 1.007 us | 10.2 us | 1.058 ms | to 50 Ohms |
| PWin = PWout mode checked: | yes | | | DC mode checked: | N/A |
| Duty Cycle Limit: | 5% | | | | |
| Delay nulled: | yes | | | | |
| Delay checked at: | 100 ns | 1 us | 10 us | 1 ms | 10 Hz, +100V |
| Actual measured output[1]: | 100.0 ns | 0.999 us | 9.995 us | 1.005 ms | to 50 Ohms |
| Double pulse checked: | yes | | | | |
| Invert mode checked: | N/A | | | | |
| ECL/TTL modes checked: | N/A | | | | |
| Zout switch checked: | yes | | | | |
| Amplitude checked at: | -10V | +20V | -50V | +100V | 100 Hz, 100 us |
| Actual measured output[2]: | -10.1V | +19.9V | -50.2V | +100.0V | into 50 Ohms |
| Amplitude polarity: | +/- | | | | |
| Zout calibration: | N/A | | | | |
| Electronic amplitude control: | OK | | | | |
| External amplify mode: | N/A | | | | |
| Bleeder resistors adequate: | yes | | | | |
| Ultravolt flux removed: | yes | | | | |
| 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 | | | | |
| PN trigger pull-downs installed: | N/A | | | | |
| PW stable during amplitude changes: | yes | | | | |
| Sync pulse width checked: | 50 ns nom. | | | | |
| Circuit Boards: | PS: | 93 | Main: | 108B | |
| Overload Trigger Resistance: | Trips at: | N/A | Installed: | 3.9k | |
| DC fuses: | Positive: | 2.5A, 1.6A | Negative: | N/A | |
| AC Current: | Quiescent: | 0.18A@230V<br>0.29A@115V | Max. Load: | 0.29A@230V<br>0.55A@115V | |
| AC fuse: | two 0.5A, for 240V use | | | | |
| 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.