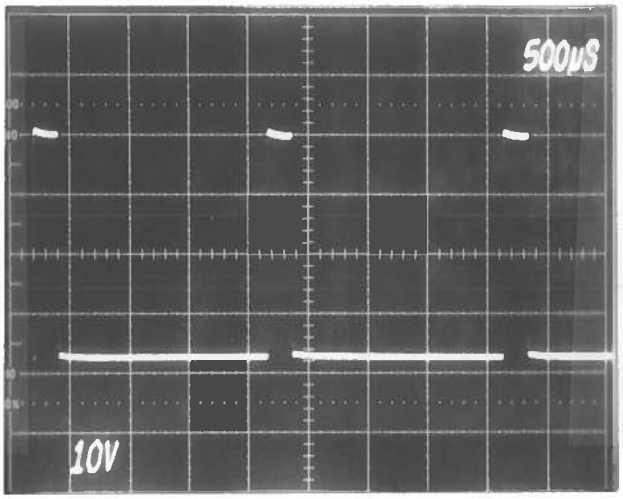
PULSE GENERATOR

PERFORMANCE CHECK

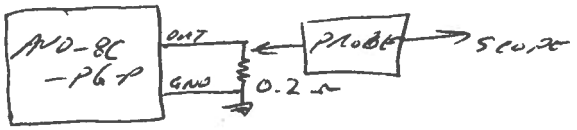
Model: MD-8C-C-P

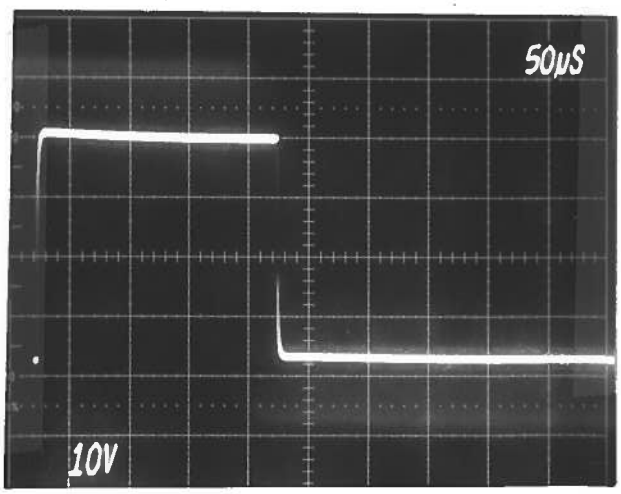
S.N.: 6046

Date: OCT 25 / 1992



Ⓐ R_L = 0.2 ∴ 50 AMPS/DIV





Ⓑ AS Ⓐ BUT 50 µS/DIV

a) Output signal amplitude: 0 TO +40 VOLTS TO $R_L \geq$ 0.2 OHMS (200 AMPS) *

b) Pulse width: 2 µS TO 20 mS (+DC)

c) Rise time: ≤ 1 µS

d) Fall time: ≤ 1 µS

e) PRF: 0.1 HZ TO 1K HZ

f) Jitter, stability: OK

g) Prime power: a) 120/240 V 50-60 HZ
b) 0 TO +40 VDC, 100 AMP LOAD PS

*) MAX PEAK CURRENT 100 AMPS

h) MAX DUTY CYCLE: 100% (BUT I NOT TO EXCEED 100 AMPS)

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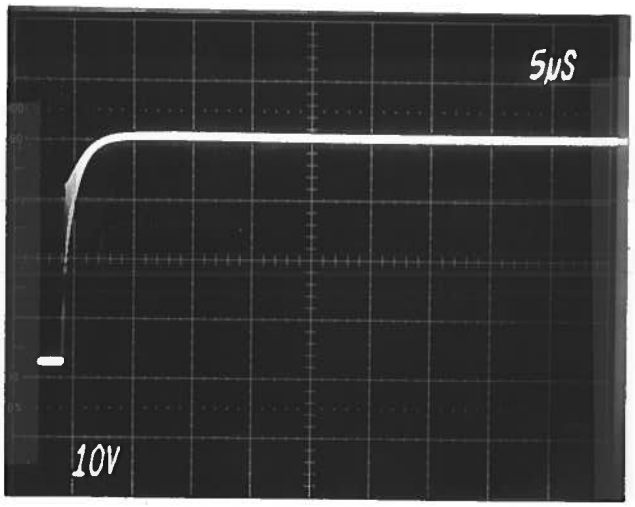
S.N.: 6046 CONT.

Date:



© AS (B) BUT 5 μS/DIV (RISE TIME)

a) Output signal amplitude:

b) Pulse width:

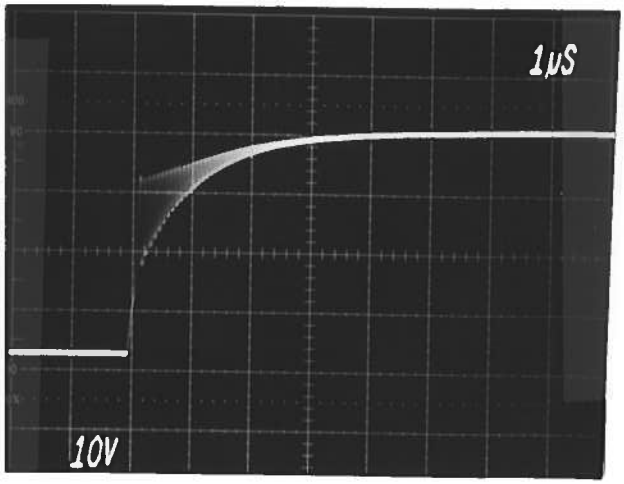
c) Rise time:

d) Fall time:

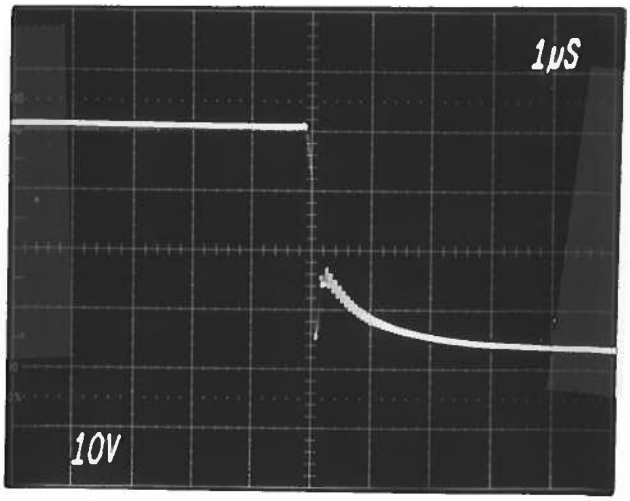
e) PRF:

f) Jitter, stability:

g) Prime power:



(D) AS (C) BUT 1 μS/DIV (RISE TIME)



(E) AS (D) BUT FALL TIME

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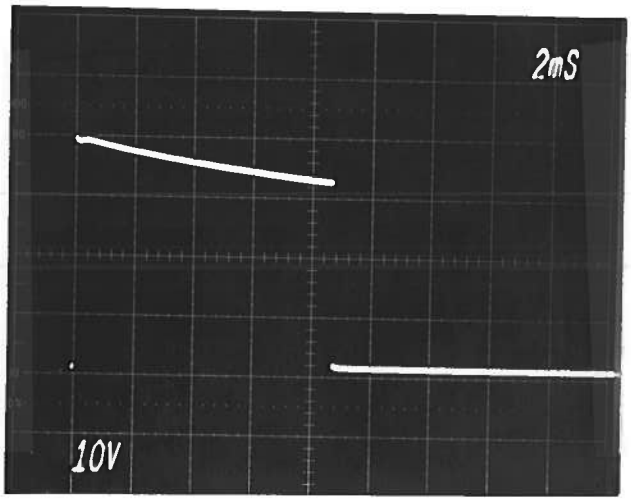
Date:



a) Output signal amplitude:

b) Pulse width:

c) Rise time:

d) Fall time:

e) PRF:

f) Jitter, stability:

g) Prime power:

(E) R_L = 0.2 WIDE PULSE, DROOP TEST.

DROOP IS HIGH BECAUSE:

(1) LAB PS COULD PROVIDE ONLY 60 AMPS. FOR WIDE PULSE WITH LOW DROOP USE = 200 AMP LAB PS

(2) AVO-8C-C HAS AN INTERNAL BY PASS CAPACITANCE OF 80,000 μfd. THEREFORE FOR VERY WIDE PULSES, DROOP CAN ONLY BE AVOIDED BY USING A VERY HIGH CURRENT POWER SUPPLY (≥ 200 AMPS).

ADDITIONAL NOTE

WHEN DRIVING A LASER DIODE LOAD PLACE A RESISTOR IN SERIES WITH THE DIODE TO PROVIDE A TOTAL LOAD VOLTAGE OF AT LEAST 10 V. THE RESISTOR WILL HELP SWAMP THE NON LINEAR NATURE OF THE DIODE.