REV NO.	TITLE
304A8495	AC/DC GATE
CONT ON SHEET 2 SH NO. 1	FIRST MADE FOR 304A8496

REVISIONS

1 BU 94/SN CBG 1/27/84

1.0 SCOPE

This document establishes the performance requirement and recommended tests for the AC/DC GATE, identified as: 304A8496.
This specification will check digital logic, analog transfer functions and component tolerances.

2.0 TEST EQUIPMENT & DOCUMENTATION

2.1 Standard Equipment Required:

Test equipment shall be provided which meets the requirements and accuracies prescribed in this specification. All test equipment is defined by quality control standard _____ except as noted in Section 2.2

2.2 Special Equipment Required:

3.0 POWER SUPPLY REQUIREMENTS AND PIN CONNECTIONS

The following regulated input voltage sources are required to test this product element.

NOMINAL VOLTAGE [1]	MAXIMUM CURRENT [2] AMPS	MIN.ADJ. RANGE	% REG.	MAXIMUM VOLTAGE [3] (VDC)	PIN(s) [4]
P24		10%	±5%	+26.0	7,8
P15		10%	±5%	+18.0	1,2
N15		10%	±5%	-18.0	5,6
ACOM					3,4,9,10

NOTES: 1. Nominal voltage used unless otherwise specified.
2. Elements requiring more than the maximum value may suffer damage.
3. Voltages above maximum voltage may impair element life.
4. Analog signal power supplies, oscilloscopes, and voltmeters should connect to ACOM for the most accurate readings.

6
49A3
3EL1

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1 B494184 CBG 1/27/84

4.0 TEST PROCEDURE

4.1 Preliminary Inspection

The element shall be inspected prior to application of power to verify that it is assembled according to the assembly drawing.

5.0 TEMPERATURE TESTS

The element shall be tested at room ambient only for production tests.

6.0 ELEMENT LOADS

The following loads should be applied during test.

LOAD TABLE

PIN	SIGNAL NAME	SHEET	LOAD
28,29	FVR	4AA	10K to ACOM
13	MCA	4BA	10K to ACOM

4QA3
3EL1

PRINTS TO

MADE BY G. Stultz
ISSUED 83-03-03
APPROVALS GWS
DRIVE SYSTEMS OPERATIONS DIV OR DEPT.
SALEM, VIRGINIA LOCATION

CODE IDENT NO.

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REVISIONS
1 BU941SN CBG 1/27/84
2 BU11603UX WLL 860614

8.0 ANALOG TESTS

8.1 Connect loads per Sec. 6.0.

8.2 Connect power per Sec. 3.0.

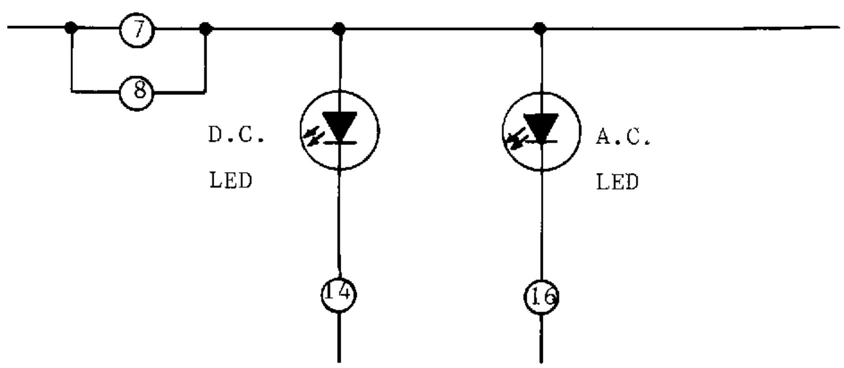
8.3 Connect two 0-15 VDC supplies as follows:

SUPPLY	TO PIN
PS1	26/27 (AC REF)
PS2	17/18 (DC REF)

Both supplies should be referenced to pin 3 (COM).

Initially set both supplies for 0 VDC.

8.4 Connect LED's per following:



8.5 Apply a 24volt, (0 – PEAK) 2HZ square wave to flash (pin 15). Set PS2 for OVDC. Adjust min pot (R62) for -1.25 ± .01 VDC at TP4. Set PS2 for +10.00 ± .1VDC and adjust span pot (R61) for -6.00 ± .1VDC at TP4. TP3 should be +6.00 ± .1VDC. DC (CR5) should be on and the DC LED connected to pin 14 should be flashing. Also verify 28/29 is +6.00 ± .20 VDC.

40A3
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TITLE AC/DC GATE

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8.6 Set PS1 and PS2 for OV. TURN R63 CCW.

Set PS1 for +1.0 ± .005 VDC and verify + 3.92 ± .4 VDC at Bal (21/22).

8.7 Adjust PS1 and PS2 to get - 5.00 ± .01VDC at TP2 and TP4. Jumper 11/12 to 7/8 and verify that the AC (CR6) is on and DC (CR5) is off. Also check that AC led connected to pin 16 is on and DC led connected to pin 14 stops flashing. The voltage at TP3 should change less than 0.5VDC upon transfer. Adjust PS1 and PS2 until +5.00 ± .01VDC is obtained at TP3 for both AC and DC modes. Adjust R63 for 0±.02VDC at TP5 (Adjust to as close to OV as possible).

8.8 Connect 10K load to MCA(13) per Sect. 6.0. Observe with an oscilloscope at pin 13 that there is a +24 VDC pulse approximately 30 milliseconds wide when changing from AC mode to DC mode (jumper 11/12 to 7/8).

4) Re-typed 6/1/85 SJ

5) BU11603UX WLL 860616

4QA3

3EL1

PRINTS TO

MADE BY STEVE JONES

ISSUED 6/6/85

APPROVALS SJ

DRIVE SYSTEMS DIV OR DEPT.

SALEM, VA. LOCATION

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