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INCH-POUND
MIL-M-38510/58C
AMENDMENT 4
23 APRIL 1999
SUPERSEDING
AMENDMENT 3
16 August 1988

MILITARY SPECIFICATION
MICROCIRCUITS, DIGITAL, CMOS, SWITCHES
MONOLITHIC SILICON, POSITIVE LOGIC

Inactive for new design after 9 August 1996

This amendment forms a part of MIL-M-38510/58C, dated 1 October 1986, and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 1

1.2.3, add new case outline as follows:

"T F-2A (14-lead, .390" x .260" x .115"), flat package".

PAGE 4

TABLE I, input high control voltage test (V_{IH1}), device types 51 and 52, conditions column: Delete " $|I_O| \leq 1 \mu A$ " in its entirety, delete " $V_O = 0.5 V$ " and substitute " $V_O \geq 4.5 V$ dc"; (V_{IH2}), device types 51 and 52, conditions column, delete " $|I_O| \leq 1 \mu A$ in its entirety, delete " $V_O = 1.0 V$ " and substitute " $V_O \geq 9.0 V$ dc"; (V_{IH3}), device types 51 and 52, conditions column, delete " $|I_O| \leq 1 \mu A$ " in its entirety, delete " $V_O = 1.5 V$ dc" and substitute " $V_O \geq 13.5 V$ dc".

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* TABLE I, input leakage current test, (I_{IH}), device type 52, maximum limits column, : Delete "45" and substitute "100"; (I_{IL}), device type 52, maximum limits column, : Delete "-45" and substitute "-100".

TABLE I, input capacitance test (C_{IS}), device types 01 and 51, maximum limits column: Delete "15" and substitute "20". Make this same change for feedthrough capacitance test (C_{ICS}); input low control voltage test (V_{IL}), device types 51 and 52, conditions column, delete " $|I_O| \leq 1 \mu A$ " (3 locations).

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TABLE I, switch "ON" resistance test, R_{ON3} , device types 02 and 52, maximum limits column: Delete "300" and substitute "350".

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4.2, following 4.2d, add the following:

"e. When device types 01 and 02 are qualified by extension (see 4.3.1), they shall be screened in accordance with the requirements for corresponding device types 51 and 52."

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FSC 5962

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FIGURE 1, device type 52: Delete "Cases A, C, D, X, and Y" and substitute "CASES A, C, D, T, X, and Y".

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Figure 8, note 5, line 1,: Delete "(1)".

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TABLE III, test number 22, C_A column, delete "1.5 V" and substitute "GND"; test number 23, C_D column, delete "1.5 V" and substitute "GND"; test number 26, C_A column, delete "3.0 V" and substitute "GND"; test number 27, C_D column, delete 3.0 V and substitute "GND"; test number 30, C_A column, delete "4.0 V" and substitute "GND"; test number 31, C_D column, delete "4.0 V" and substitute "GND".

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TABLE III, test number 57, O_C column, delete "3.5 V" and substitute "13.5 V"; test number 61, I_B column, delete "18 V" and substitute "GND", and C_B column, delete "GND" and substitute "18 V".

TABLE III, test numbers 70 through 77, C_A column, delete "18 V" and substitute "GND", and V_{DD} column; delete "GND" and substitute "18 V".

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TABLE III, test numbers 128 through 131 and 136 through 139, test limits max. column: Delete "15" and substitute "20".

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TABLE III, heading: Delete "Cases A, C, D, X, and Y" and substitute "Case A, C, D, T, X, and Y."

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TABLE III, heading: Delete "Cases A, C, D, X and Y" and substitute "Cases A, C, D, T, X, and Y."

- * TABLE III, test number 60, subgroup 1, max limit column: Delete "+8" and substitute "+800".
- * TABLE III, test numbers 61 through 68: subgroup 1, max limit column: Delete "1.0" and substitute "100"; subgroup 2, max limit column: Delete "45" and substitute "100".
- * TABLE III, test number 69, subgroup 1, max limit column: Delete "-8" and substitute "-800".
- * TABLE III, test numbers 70 through 77, VDD column: Delete "GND" and substitute "18 V". Subgroup 1, max limit column: Delete "-1.0" and substitute "-100"; subgroup 2, max limit column: Delete "-45" and

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TABLE III, heading: Delete "Cases A, C, D, X, and Y" and substitute "Cases A, C, D, T, X, and Y."

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TABLE III, heading: Delete "Cases A, C, D, X, and Y" and substitute "Cases A, C, D, T, X, and Y."

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TABLE III, heading: Delete "Cases A, C, D, X, and Y" and substitute "Cases A, C, D, T, X, and Y."

4.4.3c, delete in its entirety and substitute the following:

- "c. When device types 01 through 03 are qualified by extension (see 4.3.1), these device types will be inspected (QCI) according to the requirements for device types 51 through 53, respectively."

The margins of this amendment are marked with an asterisk to indicate where changes (additions, modifications, corrections, deletions) from the previous amendment were made. This was done as a convenience only and the Government assumes no liability whatsoever for any inaccuracies in these notations. Bidders and contractors are cautioned to evaluate the requirements of this document based on the entire content irrespective of the marginal notations and relationship to the last previous amendment.

CONCLUDING MATERIAL

Custodians:

Army - CR
Navy - EC
Air Force - 11
NASA - NA
DLA - CC

Preparing activity:
DLA - CC

Review activities:

Navy - AS, CG, MC, OS, SH
Army - AR, MI, SM
Air Force - 19, 99

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