

The documentation and process conversion measures necessary to comply with this document shall be completed by 22 April, 2002.

INCH POUND

MIL-PRF-19500/698
AMENDMENT 1
22 January 2002

PERFORMANCE SPECIFICATION

SEMICONDUCTOR DEVICE, FIELD EFFECT RADIATION HARDENED (TOTAL DOSE AND SINGLE EVENT EFFECTS) TRANSISTOR, N-CHANNEL, SILICON TYPES 2N7470T1 AND 2N7471T1 JANTXVR, F, G AND H AND JANSR, F, G AND H

This amendment forms a part of MIL-PRF-19500/698, dated 16 August 2001 and is approved for use by all Departments and Agencies of the Department of Defense.

PAGE 1

1.3, column P_T (1) $T_A = +25^\circ\text{C}$, delete "(1)".

PAGE 4

3.5.1, delete and substitute with "3.5.1 Handling. MOS devices must be handled with the following precautions to avoid damage due to the accumulation of static charge."

PAGE 8

4.5.2, drain heating current (I_H), delete "13.33 A" and substitute "11.11 A".

4.5.2, drain-source heating voltage (V_H), delete "10 V" and substitute "12 V".

4.5.3, drain heating current (I_H), delete "13.33 A" and substitute "11.11 A".

4.5.3, drain-source heating voltage (V_H), delete "10 V" and substitute "12 V".

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TABLE I, subgroup 2, static drain to source "ON" state resistance, 2N7470T1, maximum limit column, delete "0.0066" and substitute "0.006".

PAGE 14

TABLE II, subgroup 2, static drain to source on-state voltage, 2N7470T1, pre-irradiation limits, delete "0.320" and substitute "0.297".

TABLE II, subgroup 2, static drain to source on-state voltage, 2N7470T1, post-irradiation limits, R, F, and G column, delete "0.320" and substitute "0.297".

TABLE II, subgroup 2, static drain to source on-state voltage, 2N7470T1, post-irradiation limits, H column, "0.360" and substitute "0.405".

TABLE II, subgroup 2, static drain to source on-state voltage, 2N7471T1, pre-irradiation limits, delete "0.630" and substitute "0.585".

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TABLE II, subgroup 2, static drain to source on-state voltage, 2N7471T1, post-irradiation limits, R, F, and G column, delete "0.630" and substitute "0.585".

TABLE II, subgroup 2, static drain to source on-state voltage, 2N7471T1, post-irradiation limits, H column, delete "0.675" and substitute "0.855".

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TABLE III, subgroup 7, SEE irradiation, LET = 37 MeV-cm²/mg, 2N7470T1, insitu bias conditions, delete "V_{GS} = -20 V" and substitute "V_{GS} = -15 V".

TABLE III, subgroup 7, SEE irradiation, LET = 37 MeV-cm²/mg, 2N7471T1, insitu bias conditions, delete "V_{DS} = 100 V" and substitute "-40 V".

TABLE III, subgroup 7, SEE irradiation, LET = 82 MeV-cm²/mg, 2N7471T1, insitu bias conditions, delete "V_{GS} = -10 V" and substitute "V_{GS} = -8 V".

TABLE III, subgroup 7, SEE irradiation, LET = 82 MeV-cm²/mg, 2N7471T1, insitu bias conditions, delete "V_{GS} = -15 V" and substitute "V_{GS} = -10 V".

TABLE III, subgroup 7, SEE irradiation, LET = 82 MeV-cm²/mg, 2N7471T1, insitu bias conditions, delete "V_{GS} = -20 V" and substitute "V_{GS} = -15 V".

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FIGURE 4, delete and substitute:

"

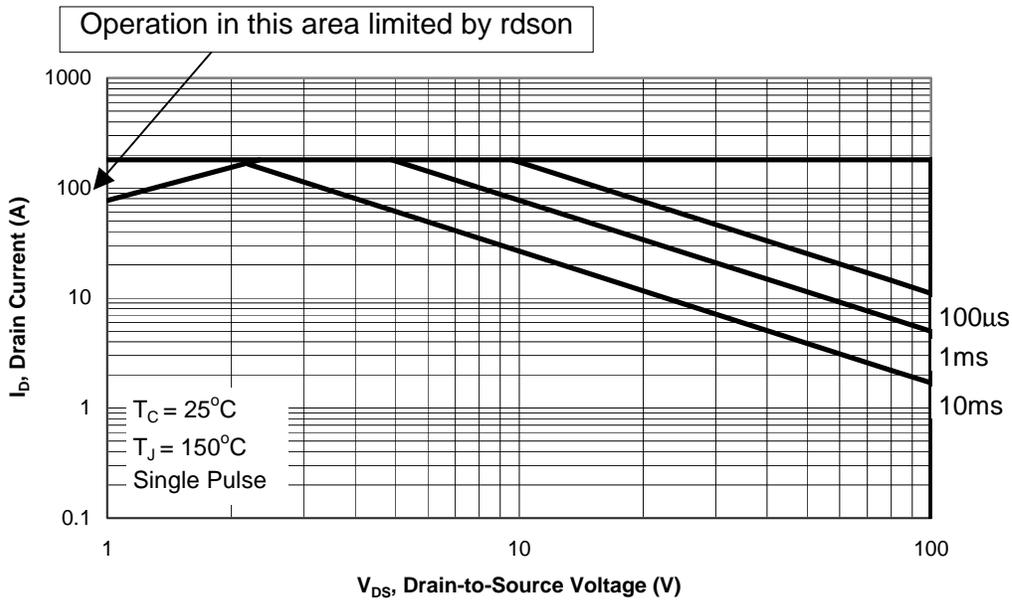


FIGURE 4. Safe operating area graph (2N7471T1)."

FIGURE 5, delete and substitute:

“

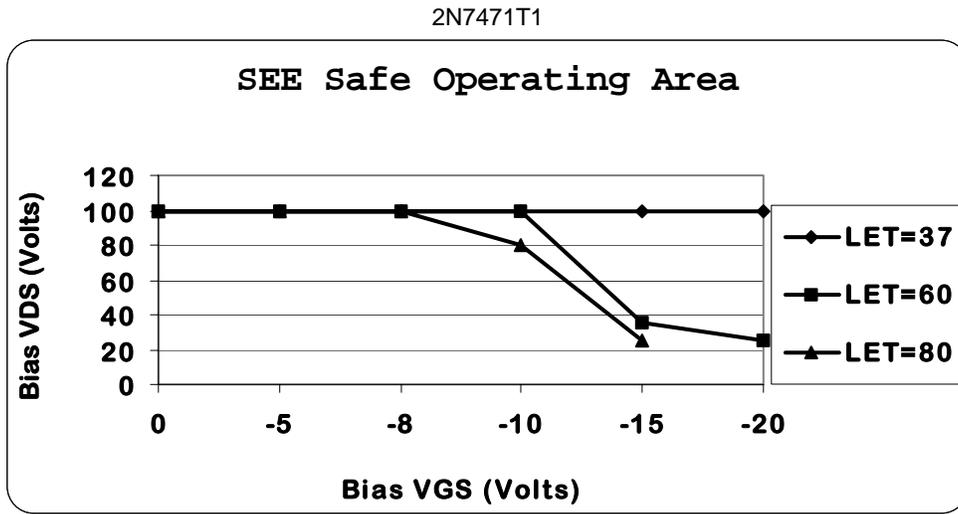
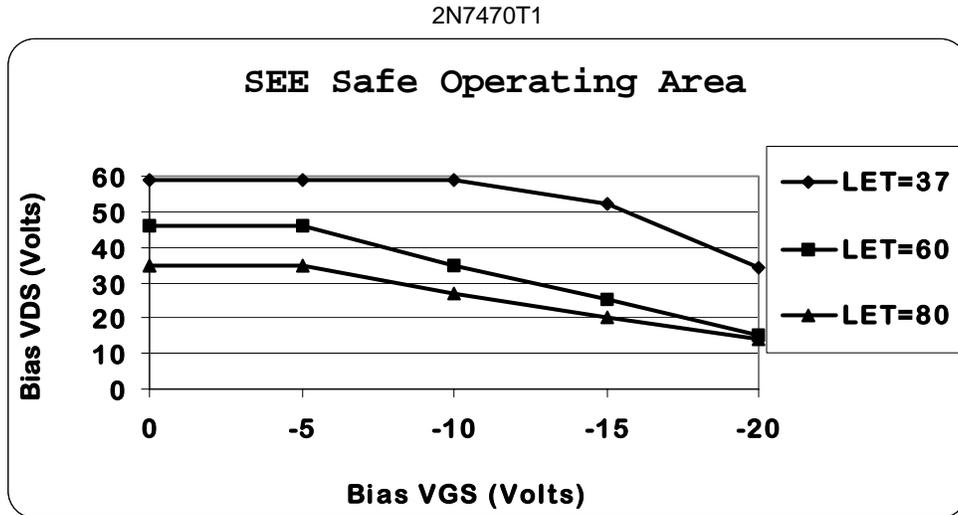


FIGURE 5. SEE safe operating area graph.”

Custodians:
Army - CR
Navy - EC
Air Force - 11
DLA - CC

Preparing activity:
DLA - CC

(Project 5961-2540)

Review activity:
Army - AV, MI
Air Force - 71