# N-Channel Enhancement Mode Field Effect Transistor

## Product Summary

| | |
|---|---|
| $V_{DS}$ | 100V |
| $I_D$ | 11A |
| $R_{DS(ON)}$( at $V_{GS}$=10V) | 13.5m |
| $R_{DS(ON)}$( at $V_{GS}$=4.5V) | 17m |
| 100% EAS Tested | |

## General Description

Split gate trench MOSFET technology
Excellent package for heat dissipation
High density cell design for low $R_{DS(ON)}$
Moisture Sensitivity Level 3
Epoxy Meets UL 94 V-0 Flammability Rating
Halogen 0.00 EMC 4

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**Electrical Characteristics** ($T_J$=25 unless otherwise noted)

| Parameter | Symbol | Conditions | Min | Typ | Max | Units |
|---|---|---|---|---|---|---|
| **Static Parameter** | | | | | | |
| Drain-Source Breakdown Voltage | $BV_{DSS}$ | $V_{GS}$= 0V, $I_D$=250μA | 100 | - | - | V |
| Zero Gate Voltage Drain Current | $I_{DSS}$ | $V_{DS}$=100V, $V_{GS}$=0V | - | - | 1 | μA |
| | | $V_{DS}$=100V, $V_{GS}$=0V, Tj=150 | - | - | 100 | |
| Gate-Body Leakage Current | $I_{GSS}$ | $V_{GS}$= ±20V, $V_{DS}$=0V | - | - | ±100 | nA |
| Gate Threshold Voltage | $V_{GS(th)}$ | $V_{DS}$=$V_{GS}$, $I_D$=250μA | 1 | 1.7 | 3 | V |
| Static Drain-Source On-Resistance | $R_{DS(on)}$ | $V_{GS}$=10V, $I_D$=11A | - | 10.5 | 13.5 | m |
| | | $V_{GS}$=4.5V, $I_D$=11A | - | 13 | 17 | |
| Diode Forward Voltage | $V_{SD}$ | $I_S$ | | | | |

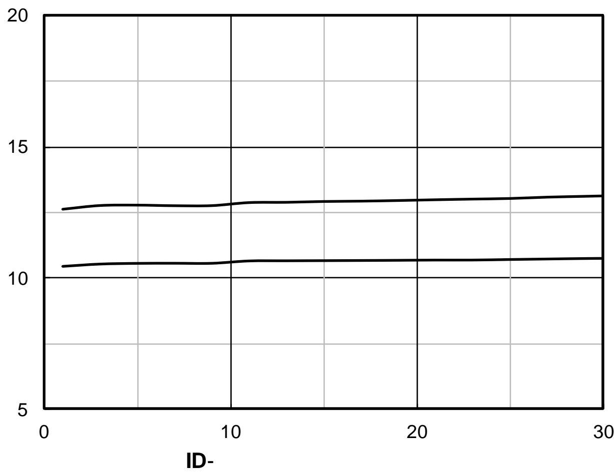


Figure 7. RDS(on) VS Drain Current

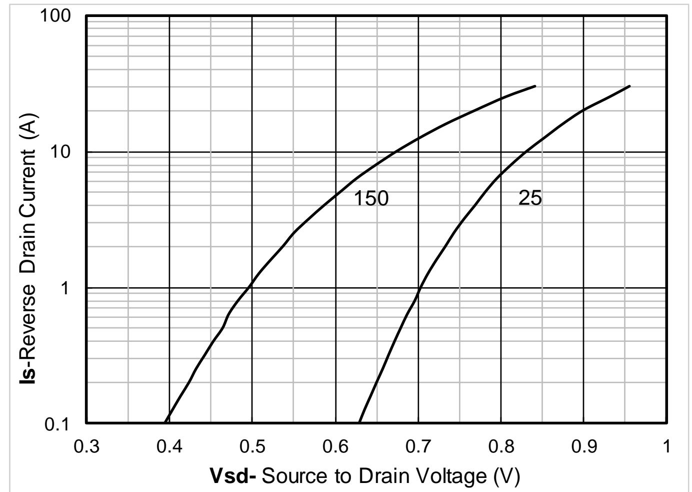


Figure 8. Forward characteristics of reverse diode

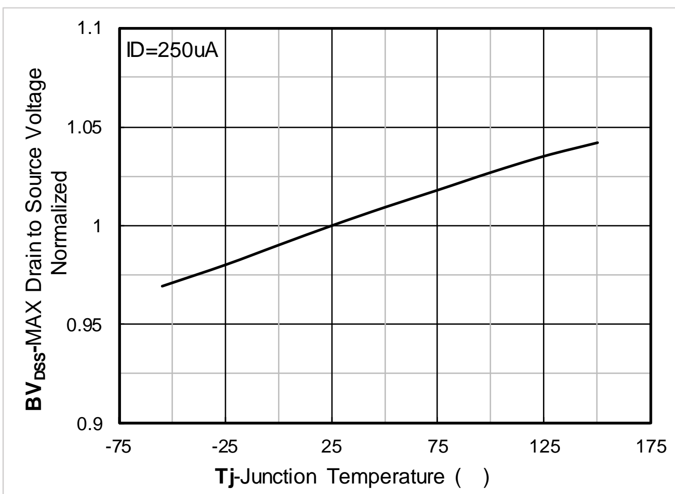


Figure 9. Normalized breakdown voltage

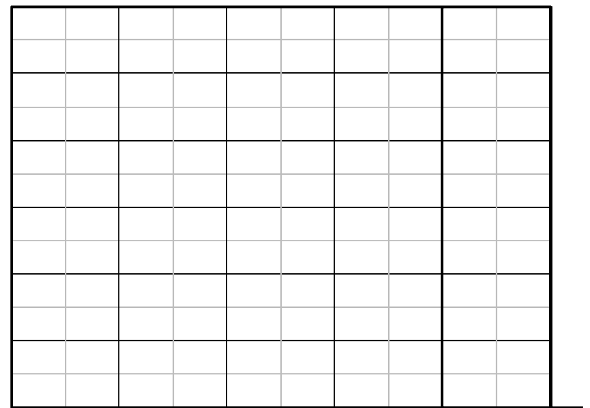

Figure 10. Normalized Threshold voltage

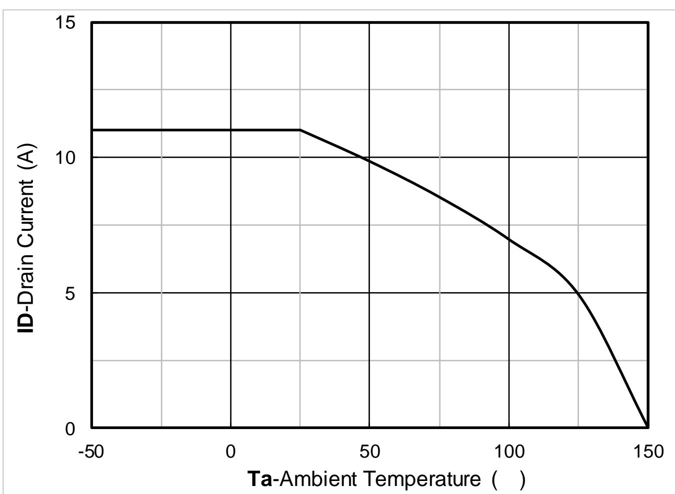


Figure 11. Current dissipation

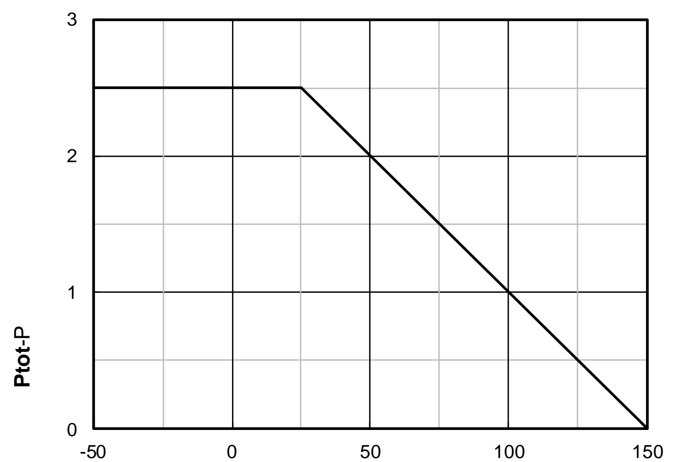


Figure 12. Power dissipation

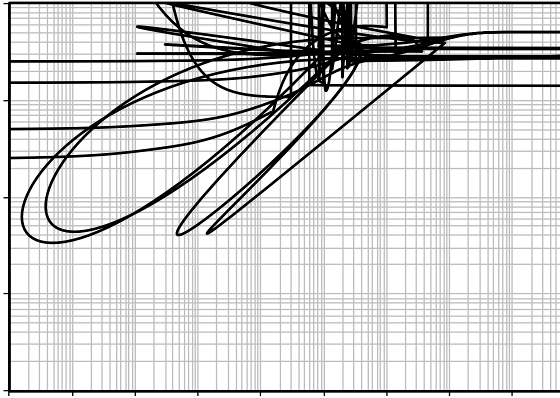


Figure 13. Maximum Transient Thermal Impedance

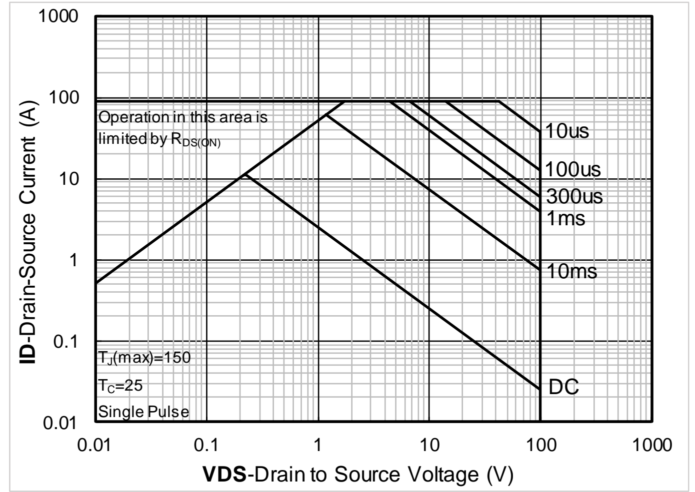


Figure 14. Safe Operation Area

## Disclaimer

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