N-Channel and P-Channel Complementary MOSFET

Product Summary

NMOS

- V_{DS} 30V
- I_D 20A
- $R_{DS(ON)}$(at V_{GS}=10V) 30mΩ
- $R_{DS(ON)}$(at V_{GS}=4.5V) 50mΩ

PMOS

- V_{DS} -30V
- I_D -20A
- $R_{DS(ON)}$(at V_{GS}=-10V) 40mΩ
- $R_{DS(ON)}$(at V_{GS}=-4.5V) 60mΩ oĞ ž ˘ ˛
- 100% EAS Tested

General Description

- Trench Power LV MOSFET technology
- High density cell design for low $R_{DS(ON)}$
- High Speed switching
- M ”

■ **NMOS Electrical Characteristics** (T_J=25 unless otherwise noted)

Parameter

NMOS Typical Electrical and Thermal Characteristics Diagrams

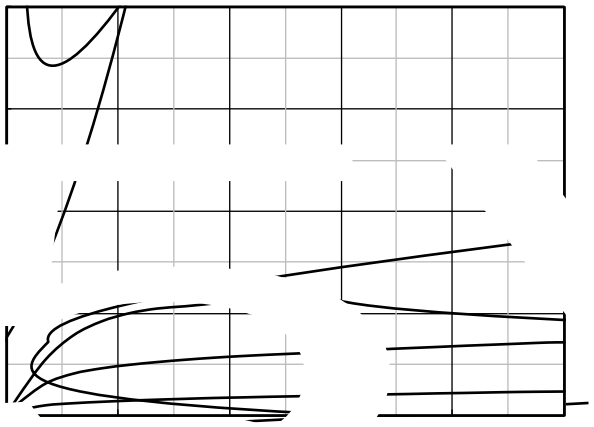


Figure 1. Output Characteristics

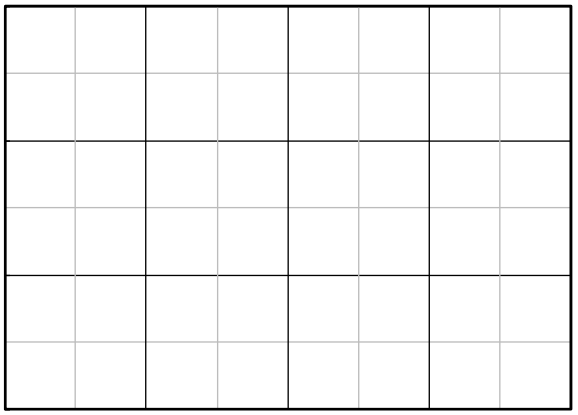


Figure 2. Transfer Characteristics

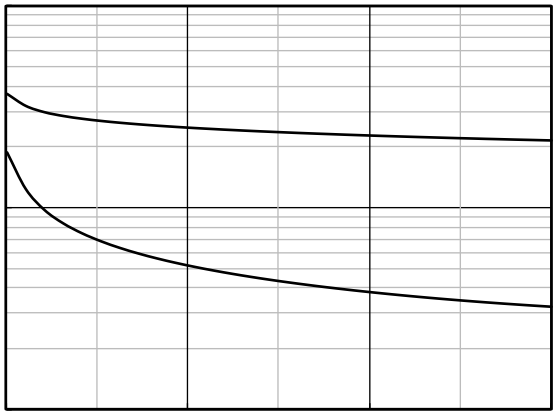


Figure 3. Capacitance Characteristics

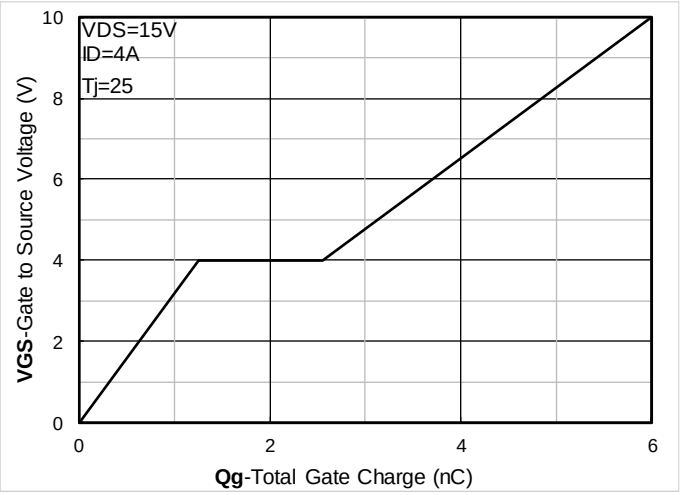


Figure 4. Gate Charge

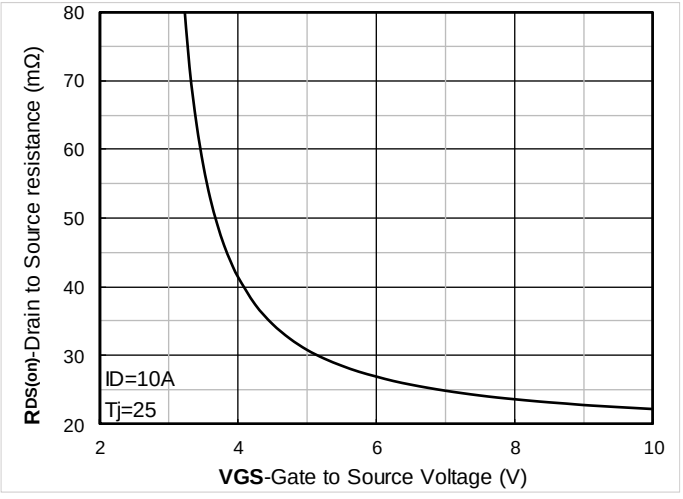


Figure 5. On-Resistance VS Gate to Source Voltage

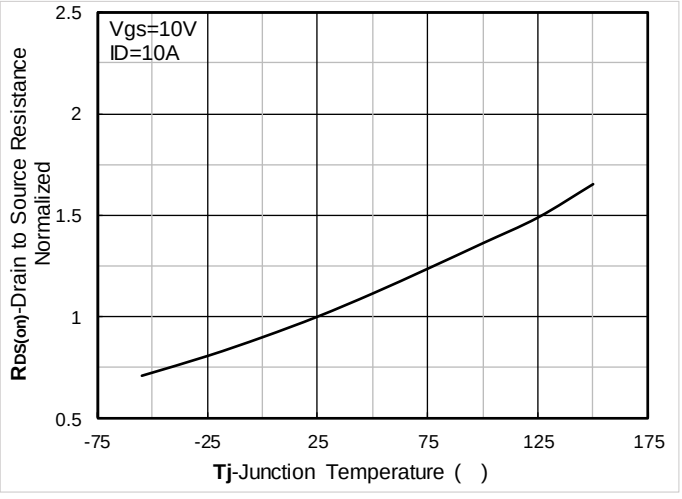


Figure 6. Normalized On- Resistance

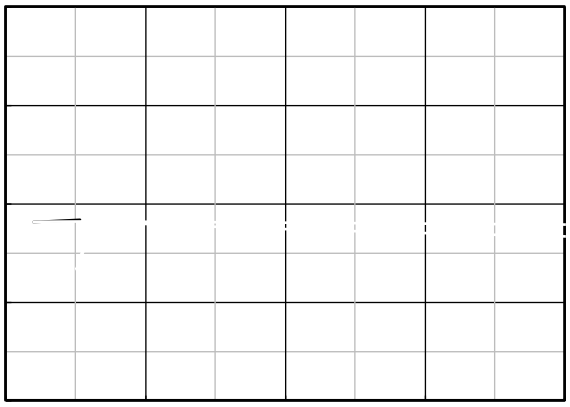


Figure 7. $R_{DS(on)}$ VS Drain Current

Figure 8. Forward characteristics of reverse diode

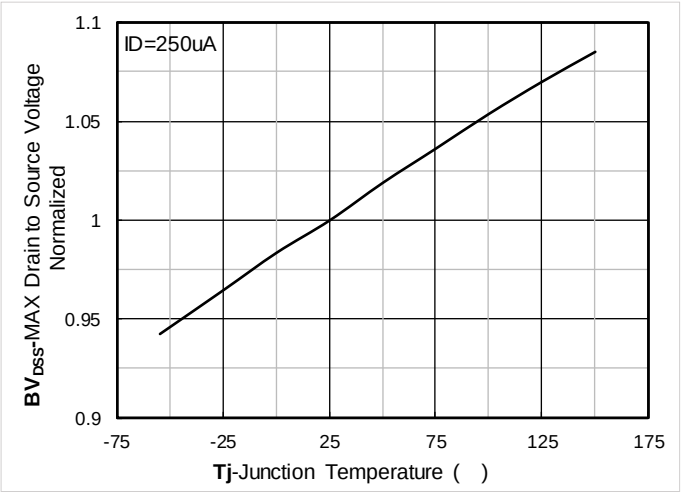


Figure 9. Normalized breakdown voltage

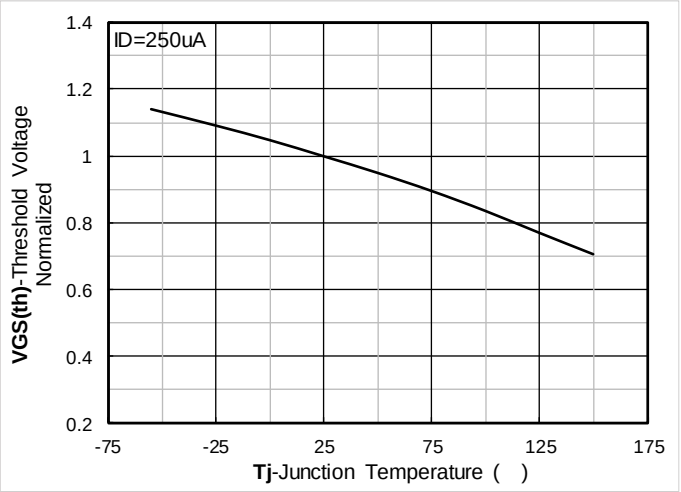


Figure 10. Normalized Threshold voltage

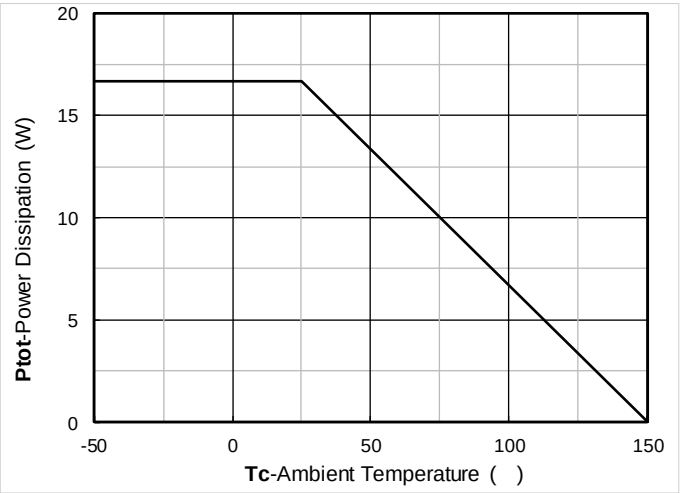


Figure 11. Current dissipation

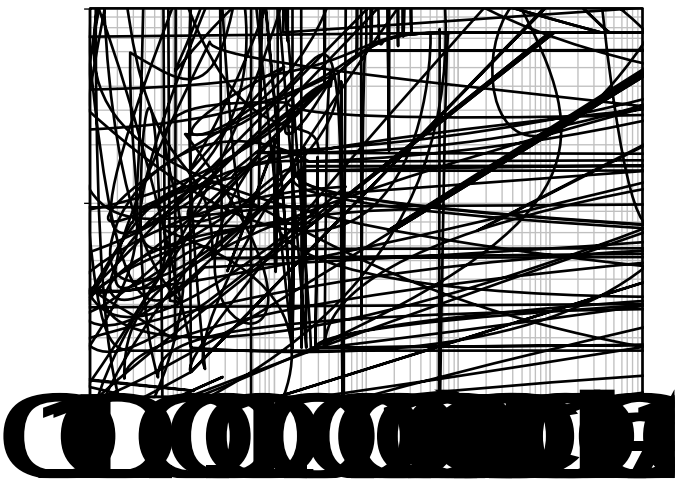


Figure 13. Maximum Transient Thermal Impedance

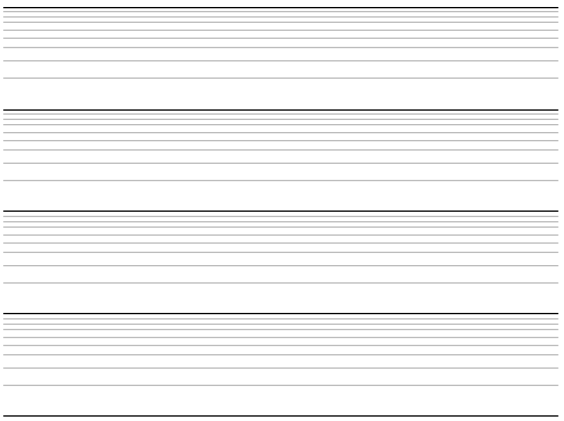


Figure 14. Safe Operation Area

PMOS Typical Electrical and Thermal Characteristics Diagrams

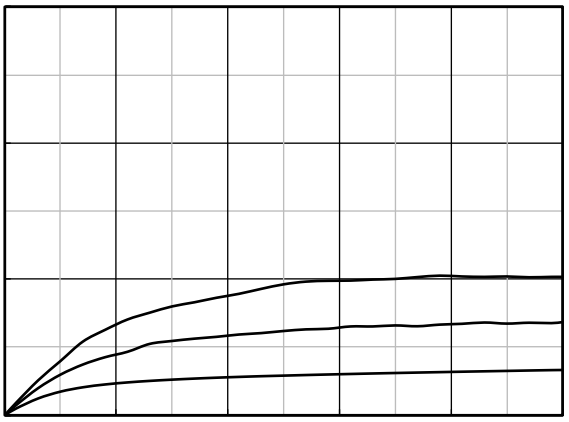


Figure 1. Output Characteristics

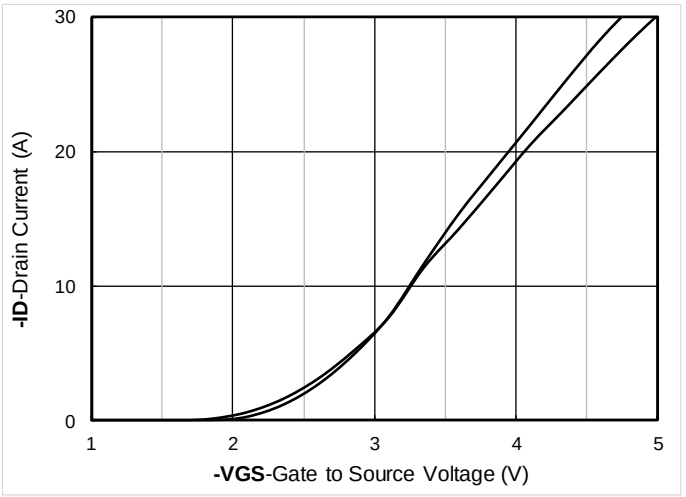


Figure 2. Transfer Characteristics

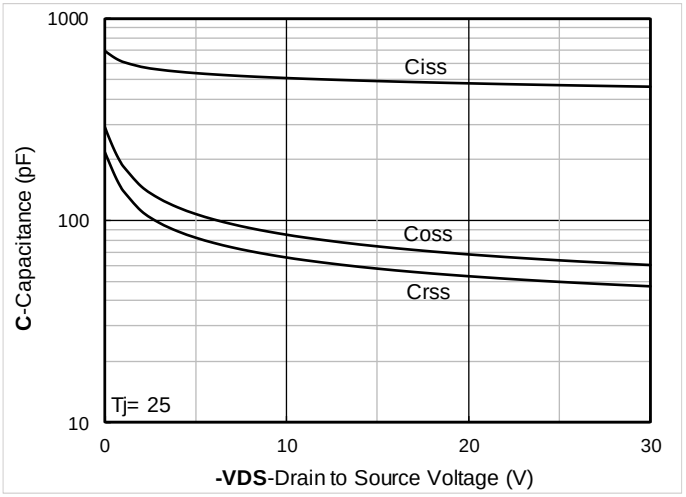


Figure 3. Capacitance Characteristics

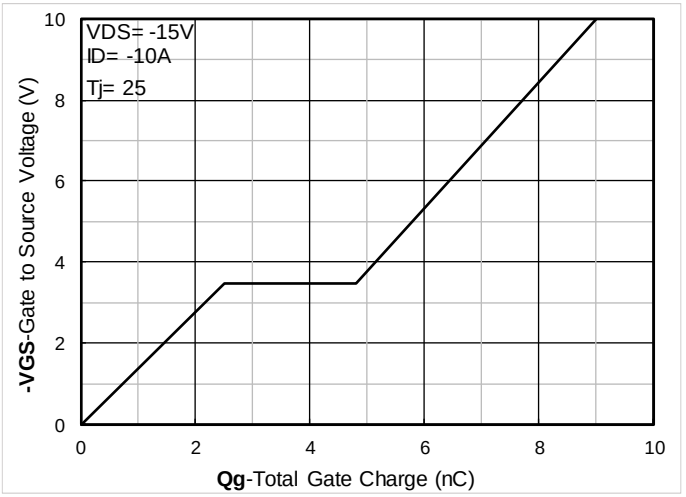
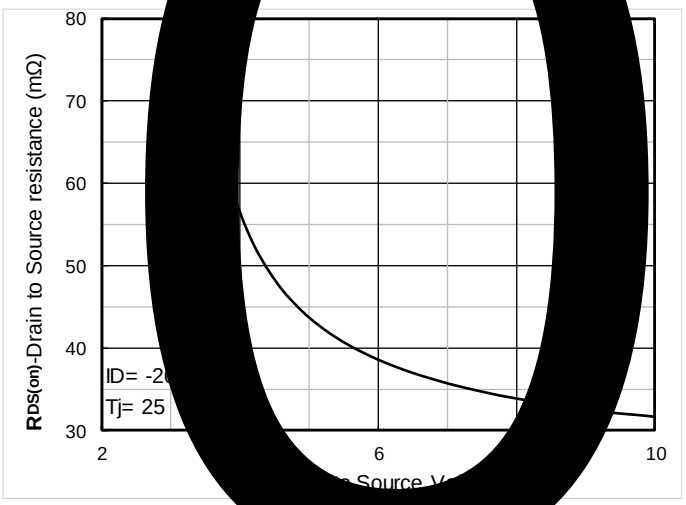


Figure 4. Gate Charge



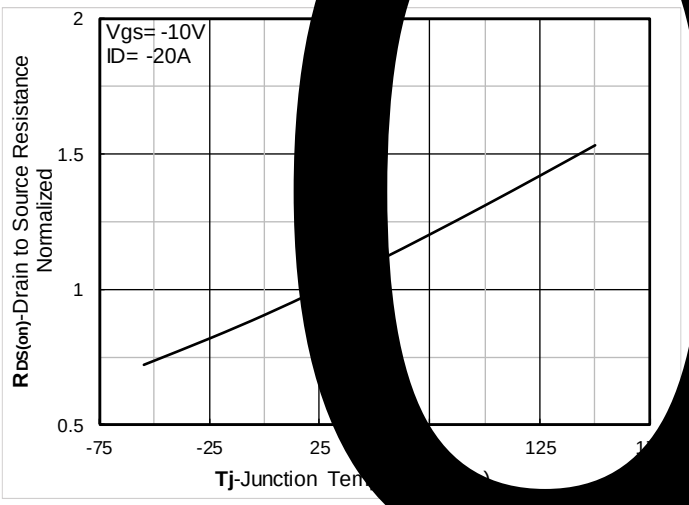
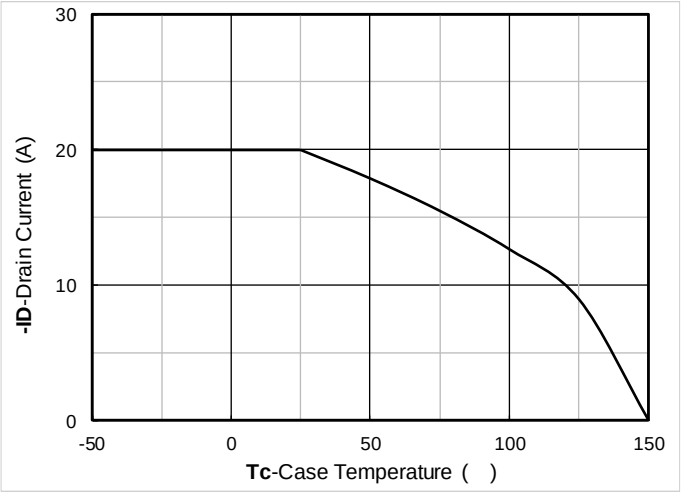


Figure0 0 596.04 842.0 0.000000754 -0.0004g0 G590.96 Tf1 0 0 1 70.824 3.517.6 g0 G[ )]TJET



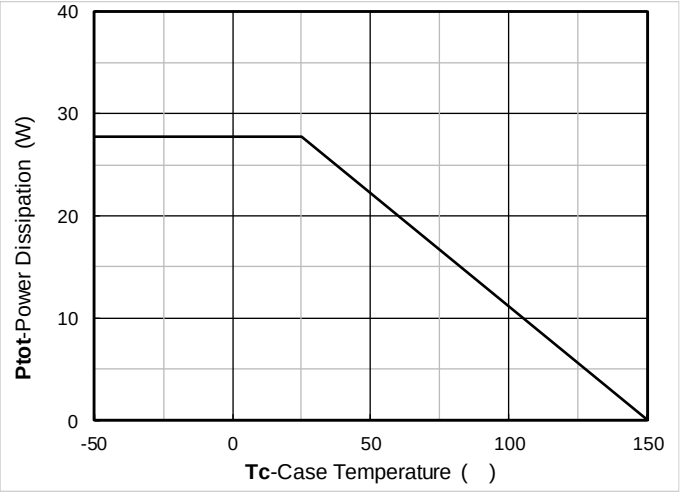


Figure 11. Current dissipation

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