Typical Characteristics 50 V_{GS} = 10V ID, DRAIN CURRENT (A) 40 30 20 10 0 0 75 100 150 50 75 100 125 T_C, CASE TEMPERATURE(°C) 150 25 T_C, CASE TEMPERATURE(°C) Figure 2. Maximum Continuous Drain Current vs. Figure 1. Normalized Power Dissipation vs. Case **Case Temperature Temperature** DUTY CYCLE - DESCENDING ORDER NORMALIZED THERMAL IMPEDANCE, Z_{euc} = 0.50 0.20 0.10 0.05 0.02 0.1 0.01 NOTES: DUTY FACTOR: D = t_1/t_2 SINGLE PULSE PEAK $T_J = P_{DM} \times Z_{\theta JC} \times R_{\theta JC} + T_C$ 0.01 10⁻³ 10⁻⁴ 10° 10⁻⁵ 10⁻² 10⁻¹ 10¹ t, RECTANGULAR PULSE DURATION(s) Figure 3. Normalized Maximum Transient Thermal Impedance 1000 V_{GS} = 10V T_C = 25°C FOR TEMPERATURES ABOVE 25°C DERATE PEAK IDM, PEAK CURRENT (A) **CURRENT AS FOLLOWS:** 150 - T_C 100 SINGLE PULSE 10 10⁻² 10⁻⁵ 10⁻³ 10⁴ 10⁻¹ t, RECTANGULAR PULSE DURATION(s) Figure 4. Peak Current Capability

Typical Characteristics

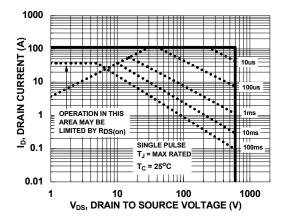


Figure 5. Forward Bias Safe Operating Area

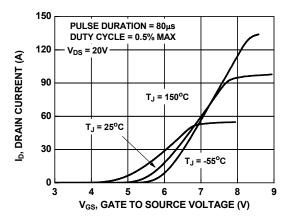


Figure 6. Transfer Characteristics

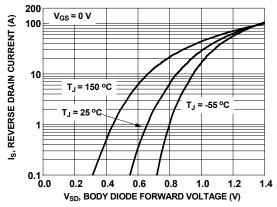


Figure 7. Forward Diode Characteristics

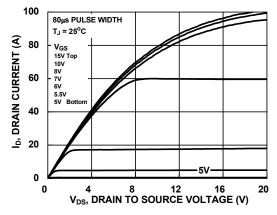


Figure 8. Saturation Characteristics

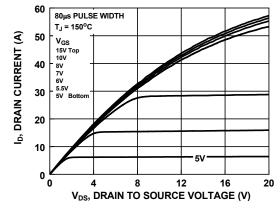


Figure 9. Saturation Characteristics

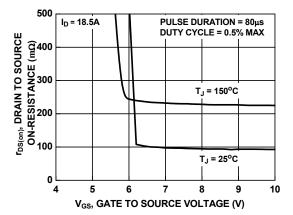


Figure 10. R_{DSON} vs. Gate Voltage

Typical Characteristics

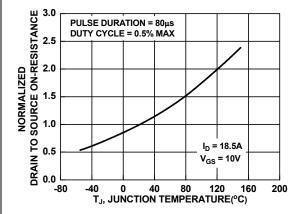


Figure 11. Normalized R_{DSON} vs. Junction Temperature

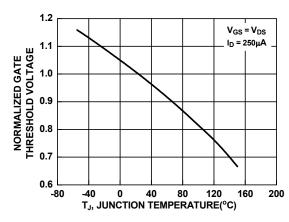


Figure 12. Normalized Gate Threshold Voltage vs. Temperature

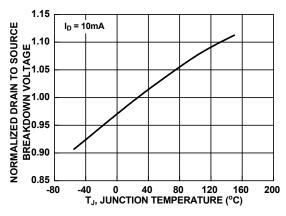


Figure 13. Normalized Drain to Source Breakdown Voltage vs. Junction Temperature

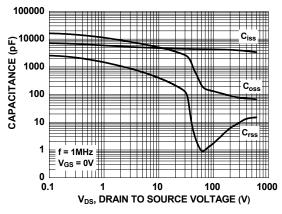


Figure 14. Capacitance vs. Drain to Source Voltage

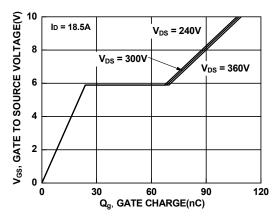


Figure 15. Gate Charge vs. Gate to Source Voltage

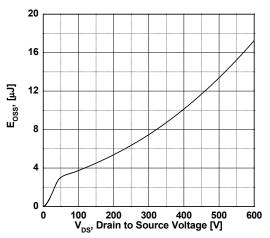


Figure 16. Eoss vs. Drain to Source Voltage

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