# 100V N-Ch Power MOSFET

## Feature

- High Speed Power Switching
- Enhanced Body diode dv/dt capability
- Enhanced Avalanche Ruggedness
- 100% UIS Tested, 100% Rg Tested
- Lead Free

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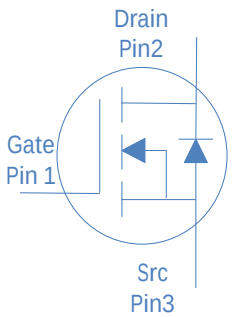
## Application

- Synchronous Rectification in SMPS
- Hard Switching and High Speed Circuit
- Power Tools
- UPS
- Motor Control

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| | | Conditions | | |
|---|---|---|---|---|
| Continuous Drain Current (Silicon Limited) | | C | | |
| | | C | | |
| Continuous Drain Current (Package Limited) | | C | | |
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| | | | | |
| Pulsed Drain Current | | | | |
| | | C | | |
| | | C | | |
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| Thermal Resistance Junction-Case | ΘJC | | |
| | ΘJA | | |

Fall Time

## Reverse Diode Characterim ɣ harge

Diode Forward Voltage

Reverse Recovery Charge F F nC

Fig 1. Typical Output Characteristics

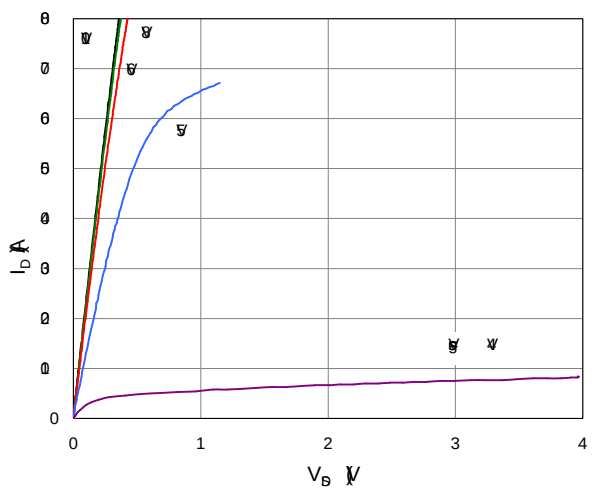



Figure 2. On-Resistance vs. Gate-Source Voltage

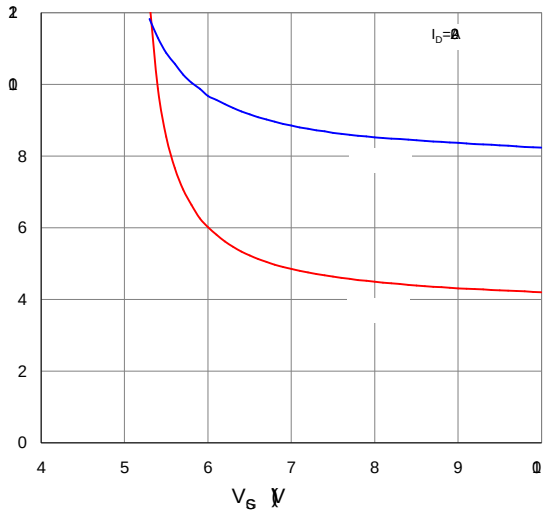



Figure 3. On-Resistance vs. Drain Current and Gate Voltage

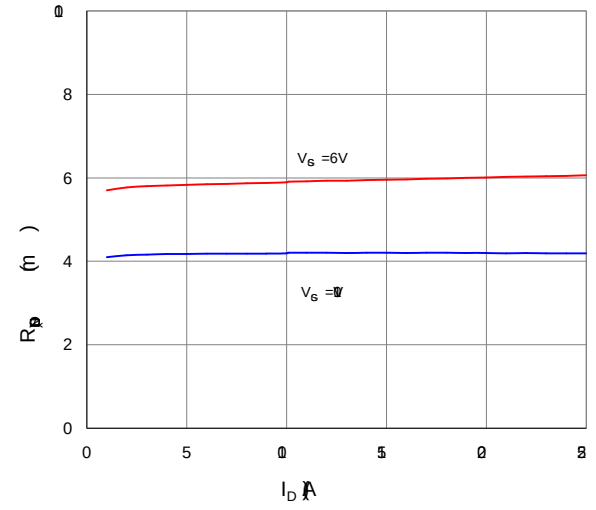



Figure 4. Normalized On-Resistance vs. Junction Temperature

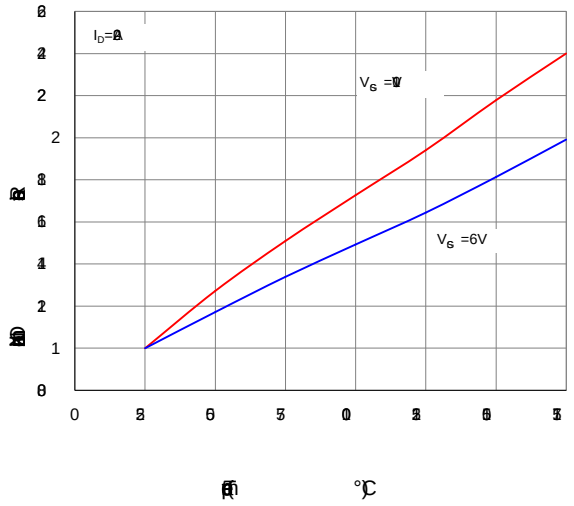



Figure 5. Typical Transfer Characteristics

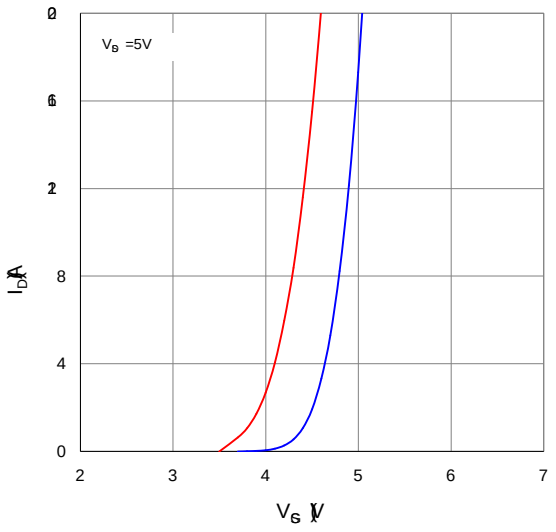
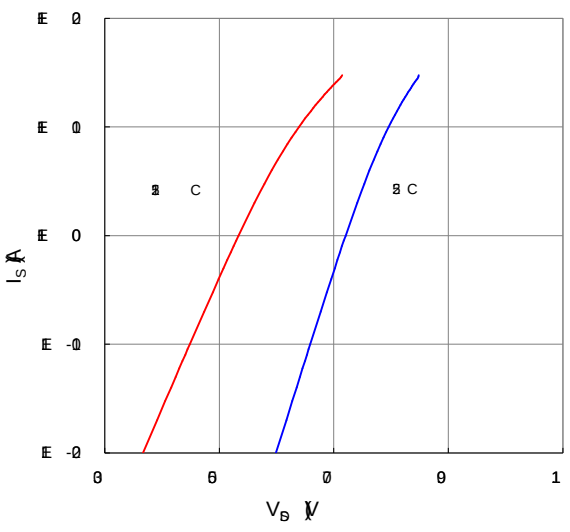



Figure 6. Typical Source-Drain Diode Forward Voltage



| Figure 7. Typical Gate-Charge vs. Gate-to-Source Voltage | Figure 8. Typical Capacitance vs. Drain-to-Source Voltage |
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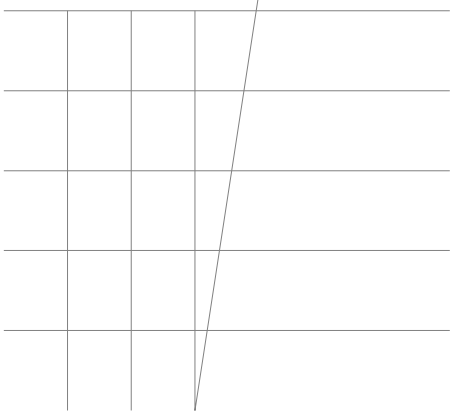
|  | |

| Figure 9. Maximum Safe Operating Area | Figure 10. Maximun Drain Current vs. Case Temperature |
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| Figure 11. Normalized Maximum Transient Thermal Impedance, Junction-to-Case |
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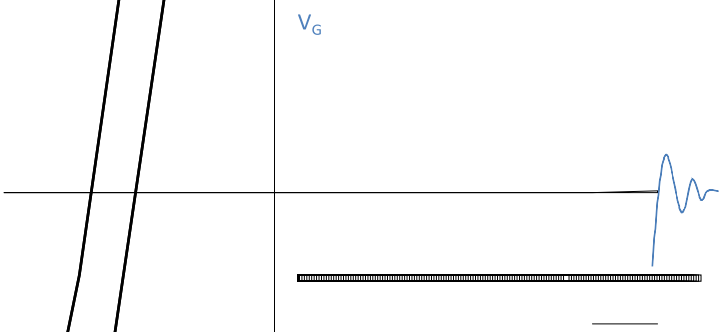


Gate Charge Test

10.28

15.80

C 13.48

0.82

2.80

6.80

10.28

C 8.59

0.83

5.08

F 1.28

8