◇
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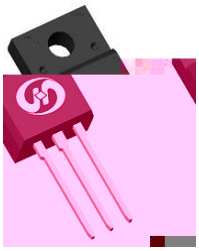
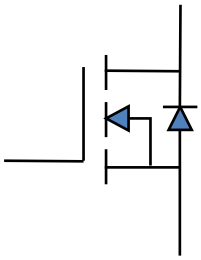
Package Marking





**=25 (unless otherwise specified)**

Gate to Source Voltage

Avalanche Energy, Single Pulse =25 mJ

=25 W

J

Thermal Resistance Junction-Case ΘJC /W

Thermal Resistance Junction-Ambient ΘJA /W

## Electrical Characteristics at T =25 (unless otherwise specified)

### Static Characteristics

| | | | | |
|---|---|---|---|---|
| Drain to Source Breakdown Voltage | (BR)DSS | μ | | |
| | | μ | | |
| | | | =25 | |
| | | | =100 | μ |
| Gate to Source Leakage Current | | | | |
| Drain to Source on Resistance | | | | Ω |
| | | | | Ω |
| Transconductance | fs | | | |
| Gate Resistance | | Open, f=1MHz | | Ω |

### Dynamic Characteristics

| | | | |
|---|---|---|---|
| Input Capacitance | | | |
| Output Capacitance | | =125V, f=1MHz | |
| Reverse Transfer Capacitance | | | |
| Gate to Source Charge | | | |
| Turn off Delay Time | d(off) | Ω | |
| | f | | |

### Reverse Diode Characteristics

| | |
|---|---|
| Reverse Recovery Time | |
| Reverse Recovery Charge | |

Fig 1. Typical Output Characteristics

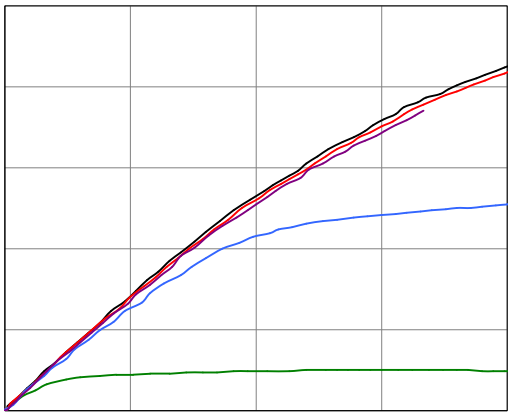


Figure 2. On-Resistance vs. Gate-Source Voltage

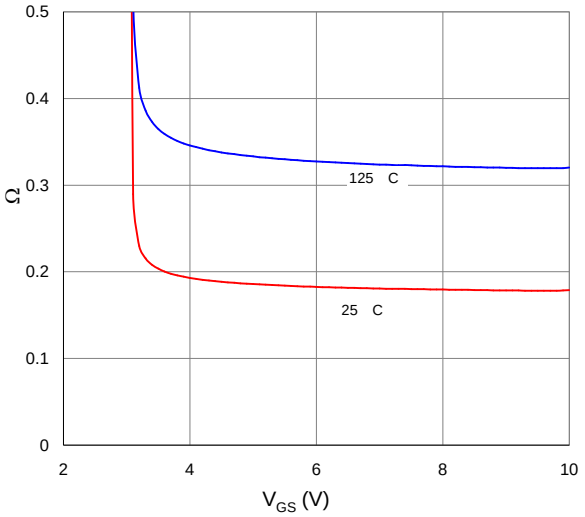



Figure 3. On-Resistance vs. Drain Current and Gate Voltage

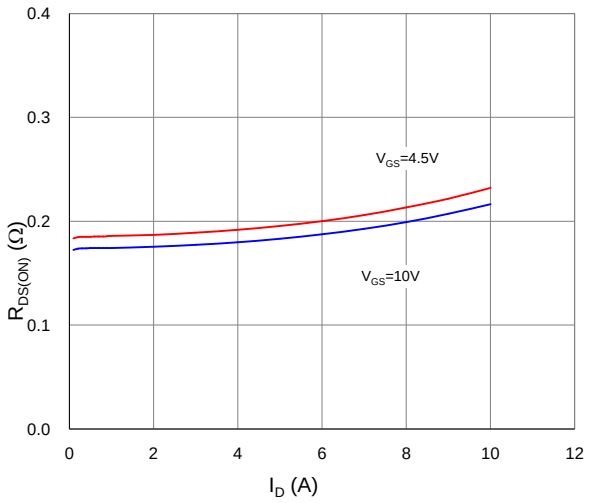



Figure 4. Normalized On-Resistance vs. Junction Temperature

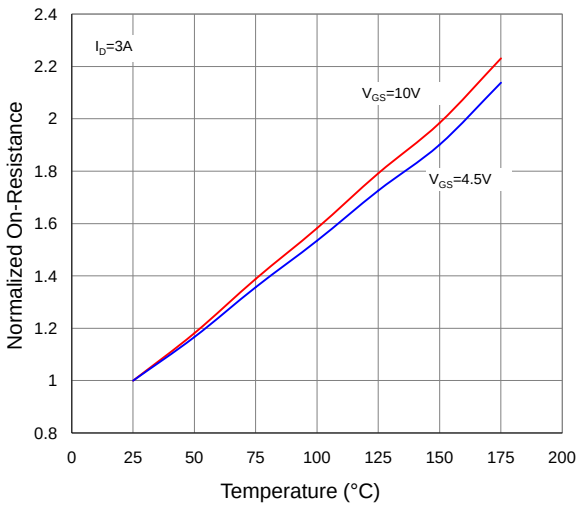



Figure 5. Typical Transfer Characteristics

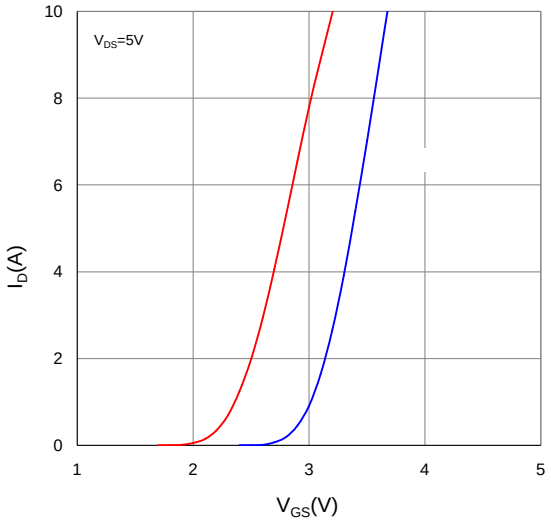



Figure 6. Typical Source-Drain Diode Forward Voltage

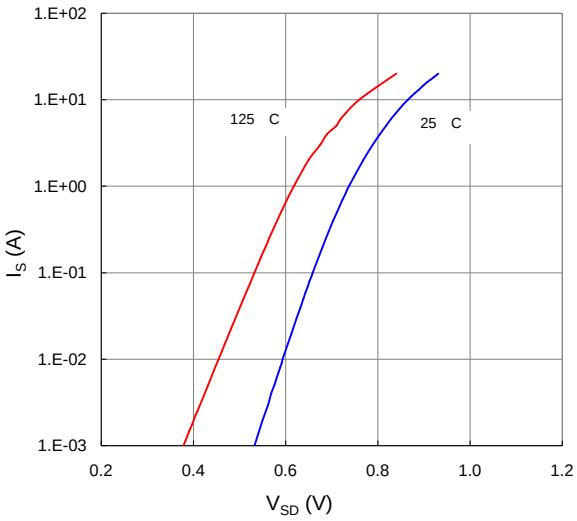
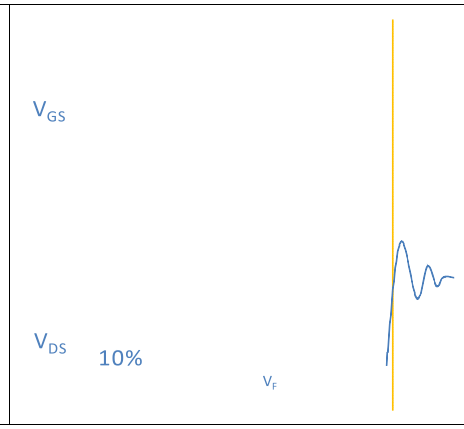
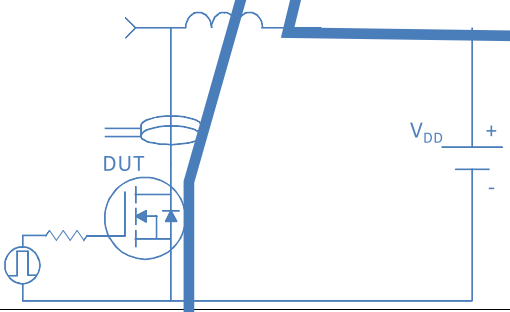


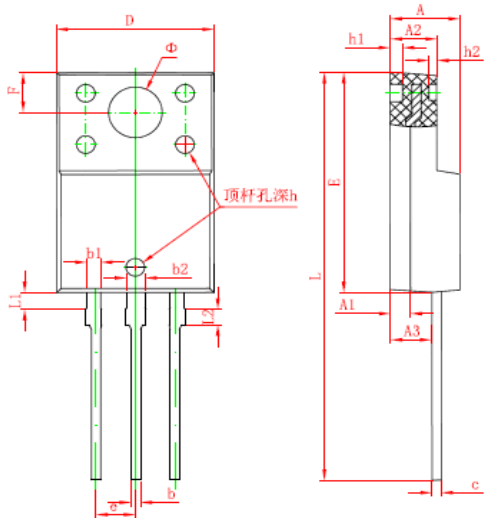
Figure 7. Typical Gate-Charge vs. Gate-to-Source Voltage

Figure 8. Typical Capacitance vs. Drain-to-Source Voltage

Figure 9. Maximum Safe Operating Area

Figure 11. Normalized Maximum Transient Thermal Impedance, Junction-to-Case

| Inductive switching Test | |
|---|---|
| |  |
| | |
| Uclamped Inductive Switching (UIS) Test | |
|  | |
| Diode Recovery Test | |
| | |




| Symbol | Dimensions In Millimeters | | Dimensions In Inches | |
|---|---|---|---|---|
| | Min. | Max. | Min. | Max. |
| A | 4.350 | 4.650 | 0.169 | 0.185 |
| A1 | 1.300 REF. | | 0.051 REF. | |
| A2 | 2.850 | 3.150 | 0.112 | 0.124 |
| A3 | 2.600 | 2.800 | 0.102 | 0.110 |
| b | 0.500 | 0.750 | 0.020 | 0.030 |
| b1 | 0.800 | 1.050 | 0.031 | 0.041 |
| b2 | 1.100 | 1.350 | 0.043 | 0.053 |
| c | 0.500 | 0.750 | 0.020 | 0.030 |
| D | 9.960 | 10.360 | 0.392 | 0.408 |
| E | 14.800 | 15.200 | 0.583 | 0.598 |
| e | 2.540 TYP. | | 0.100 TYP. | |
| F | 2.700 REF. | | 0.106 REF. | |
| Φ | 3.500 REF. | | 0.138 REF. | |
| h | 0.000 | 0.300 | 0.000 | 0.012 |
| h1 | 0.800 REF. | | 0.031 REF. | |
| h2 | 0.500 REF. | | 0.020 REF. | |
| L | 28.000 | 28.400 | 1.102 | 1.118 |
| L1 | 1.100 | 1.300 | 0.043 | 0.051 |
| L2 | 0.920 | 1.080 | 0.036 | 0.043 |