

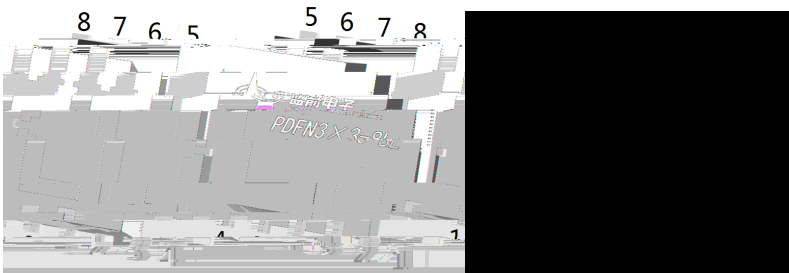
PDFN 3×3-8L

Complementary Enhancement MOSFET in a PDFN3×3-8L Plastic Package.

| | |
|------------------------|-------------------------|
| N-channel | P-channel |
| VDS(V)=20V | VDS(V)=-20V |
| ID=28A | ID=-25A |
| RDS(ON)<15m (VGS=10V) | RDS(ON)<20m (VGS=-10V) |
| RDS(ON)<20m (VGS=4.5V) | RDS(ON)<25m (VGS=-4.5V) |
| RDS(ON)<25m (VGS=2.5V) | RDS(ON)<30m (VGS=-2.5V) |

HF Product.

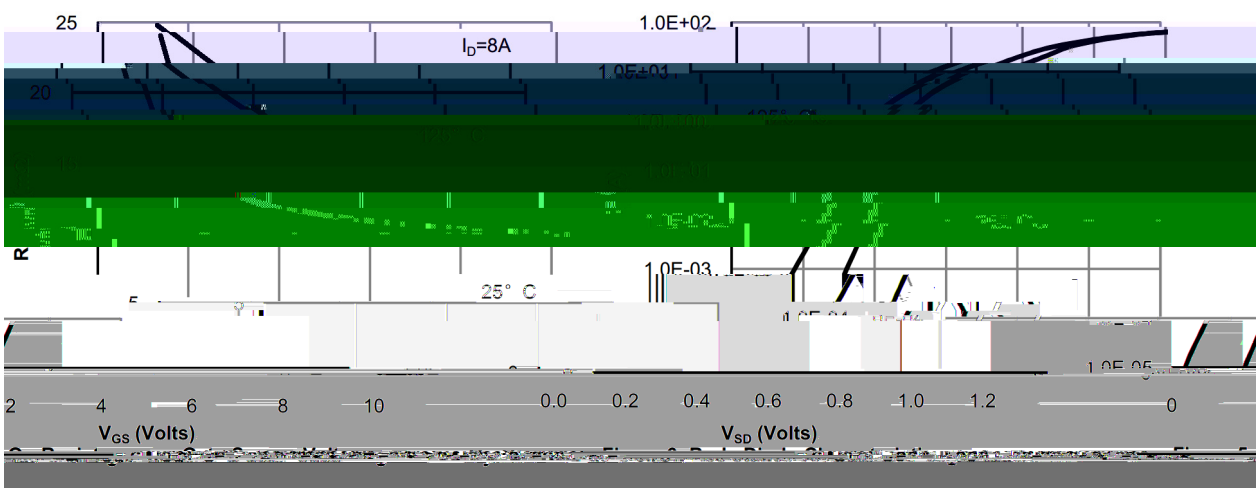
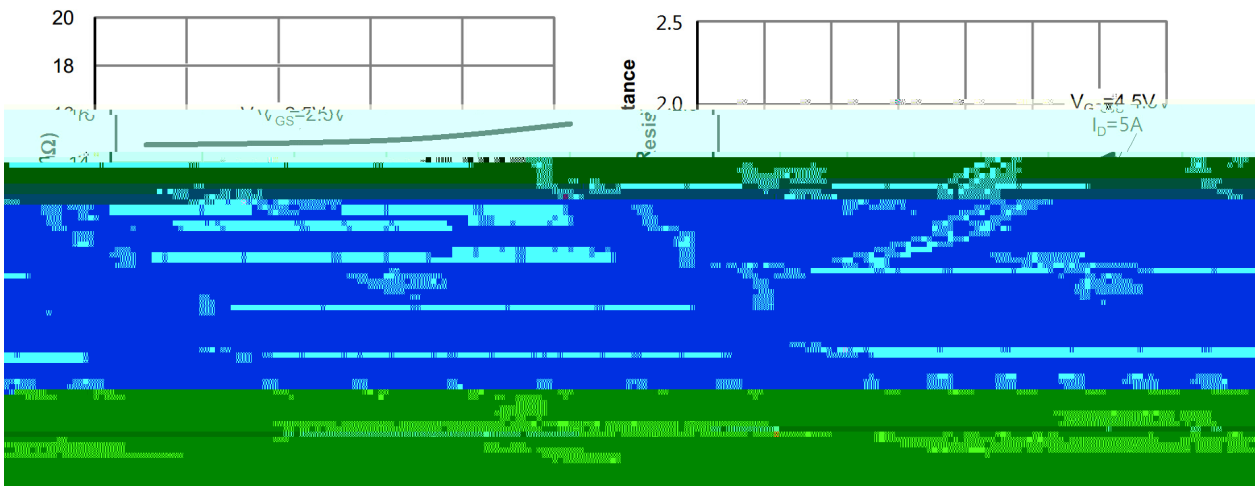
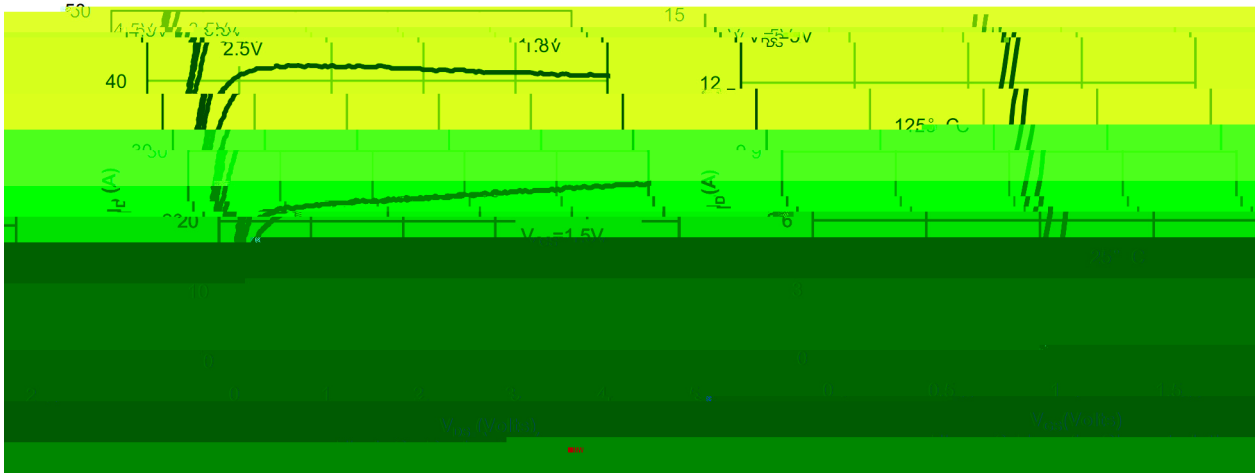
Battery protection switch, Mobile device battery charging and discharging, Load switch



See Marking Instructions.

| Parameter | Symbol | Rating | | Unit |
|--|---------------------------------------|-------------|------------|------|
| | | N-channe | P-channell | |
| Drain-Source Voltage | V_{DSS} | ±20 | | V |
| Gate-Source Voltage | V_{GSS} | ±12 | | V |
| Continuous Drain Current | $I_D (T_C=25 \text{ }^\circ\text{C})$ | 28 | -25 | A |
| Pulsed Drain Current | I_{DM} | 43 | -38 | A |
| Avalanche Current | I_{AS} | 2.8 | 13.4 | A |
| Avalanche energy L=0.5mH | E_{AS} | 3.9 | 89.8 | mJ |
| Power Dissipation | $P_D (T_C=25 \text{ }^\circ\text{C})$ | 18 | 17 | W |
| Junction and Storage Temperature Range | T_J, T_{STG} | -55 to +150 | | |
| Maximum Junction-to-Ambient | R_{JA} | 95 | | /W |
| Maximum Junction-to-Case | R_{JC} | 7 | | /W |

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|-----------------------------------|--------------|--|-----|------|-----------|---------|
| Drain-Source Breakdown Voltage | BV_{DSS} | $V_{GS}=0V$ $I_D=250\mu A$ | 20 | 22.5 | | V |
| Zero Gate Voltage Drain Current | I_{DSS} | $V_{DS}=20V$ $V_{GS}=0V$ | | | 1.0 | μA |
| Gate-Body leakage current | I_{GSS} | $V_{GS}=\pm 12V$ $V_{DS}=0V$ | | | ± 100 | nA |
| Gate Threshold Voltage | $V_{GS(th)}$ | $V_{DS}=V_{GS}$ $I_D=250\mu A$ | 0.5 | 0.7 | 1.2 | V |
| Static Drain-Source On-Resistance | $R_{DS(on)}$ | $V_{GS}=10V$ $I_D=10A$ | | 10 | 15 | m |
| | | $V_{GS}=4.5V$ $I_D=5A$ | | 11.5 | 20 | m |
| | | $V_{GS}=2.5V$ $I_D=2.5A$ | | 15 | 25 | m |
| Diode Forward Voltage | V_{SD} | $V_{GS}=0V$ $I_S=1.0A$ | | 0.69 | 1.2 | V |
| Input Capacitance | C_{iss} | $V_{DS}=15V$ $V_{GS}=0V$ $f=1.0MHz$ | | 1000 | | pF |
| Output Capacitance | C_{oss} | | | 715 | | pF |



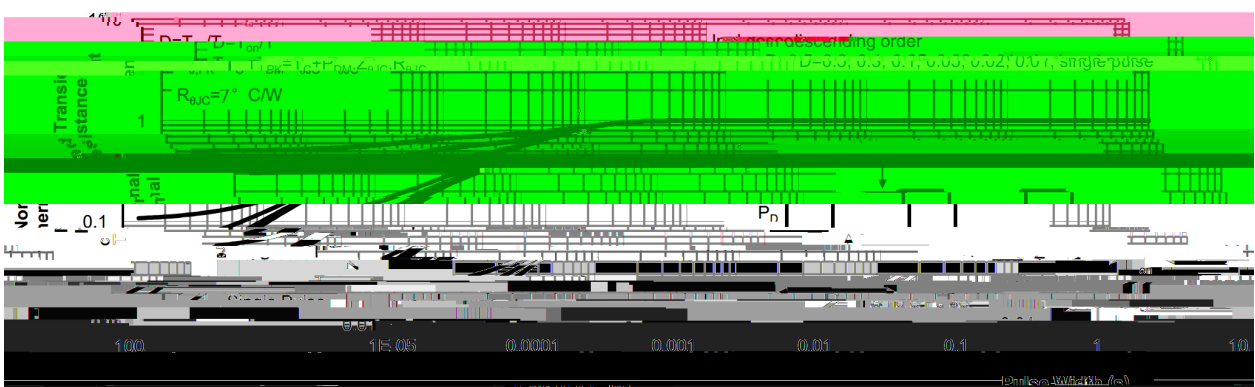
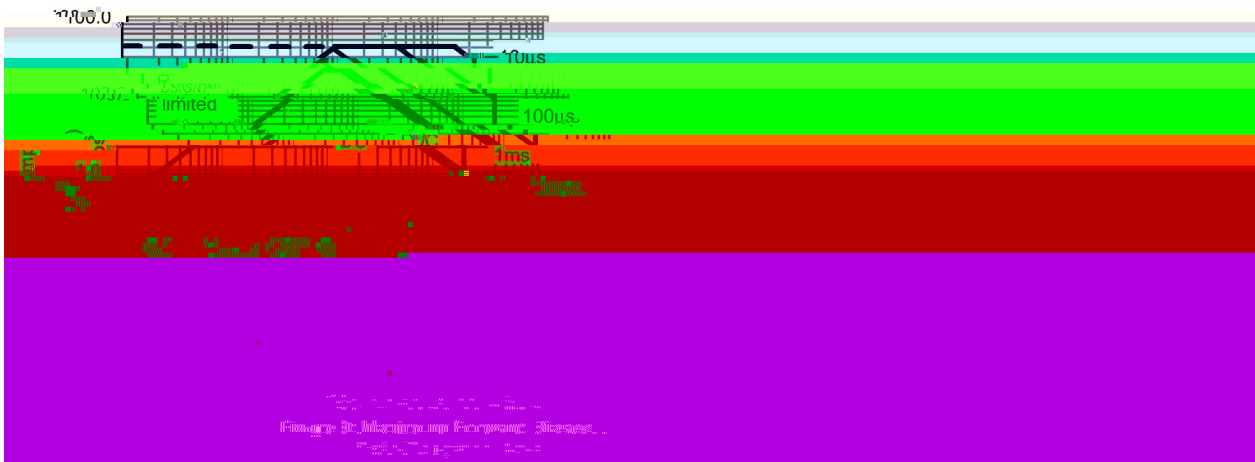
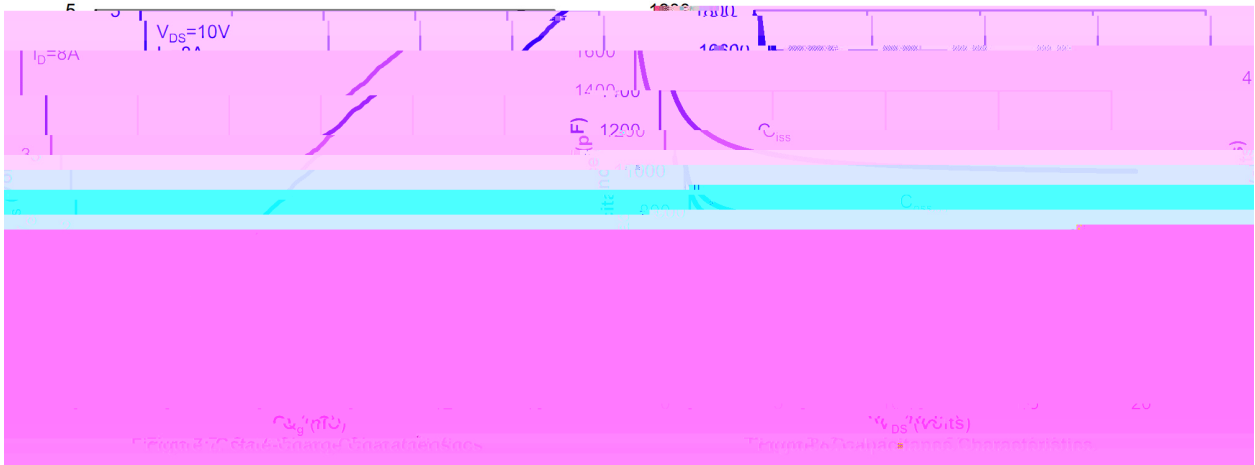
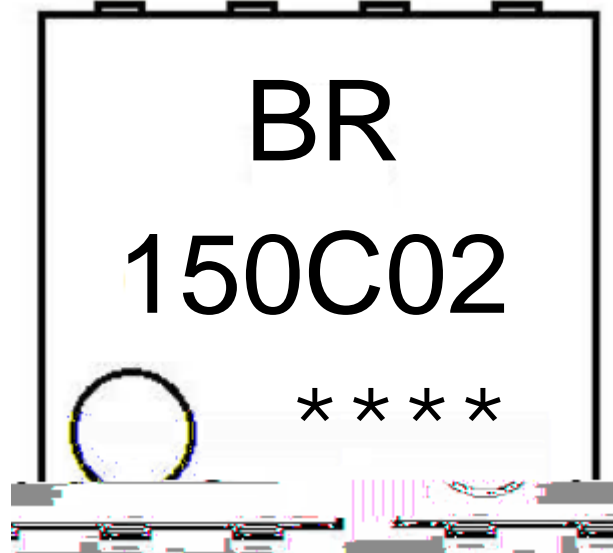


Figure 10- Normalized Maximum Transient Thermal Impedance



BR

150C02

Note:

BR: Company Code

150C02: Product Type Code

****: Lot No. Code, code change with Lot No

Temperature Profile for IR Reflow Soldering(Pb-Free)

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Note:

- | | | | |
|---|-----------|-------------|---|
| 1 | 150 ~ 180 | 60 ~ 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245±5 | 5±0.5sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | 2 ~ 10 | /sec. | 3. Cooling Speed: 2~10 /sec. |

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ REEL

Package Type Units Dimension (unit mm)