N Channel Enhancement

- High speed switching
- Very low switching losses
- High blocking voltage with low on-resistance
- Temperature independent turn-off switching losses
- Halogen free, RoHS compliant

- Cooling effort reduction
- Efficiency improvement
- Reduced cooling requirements
- Increased power density
- Increased system switching frequency

- EV motor drive
- PV string inverters
- Solar power optimizer
- Switch mode power supplies

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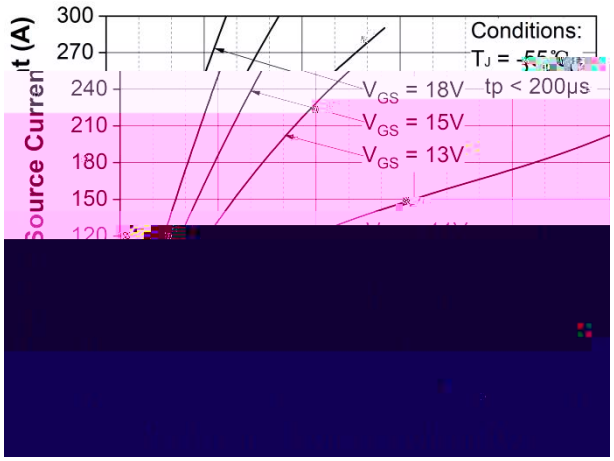



Figure 1. Output characteristics $T_J$ = -55 ºC

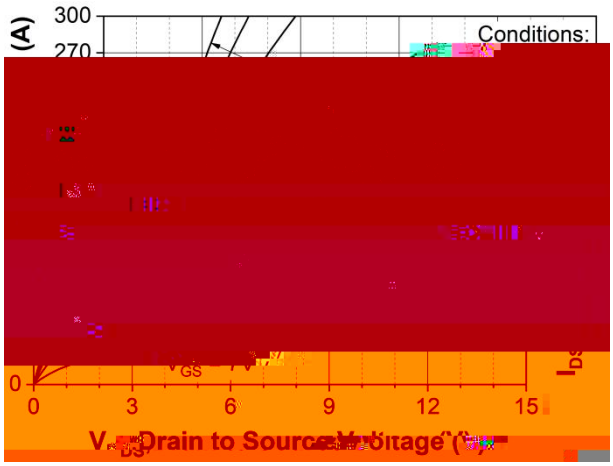



Figure 2. Output characteristics $T_J$ = 25 ºC

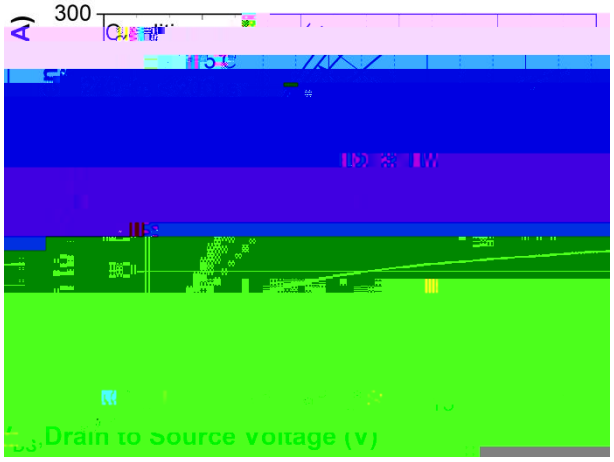



Figure 3. Output characteristics $T_J$ = 175 ºC

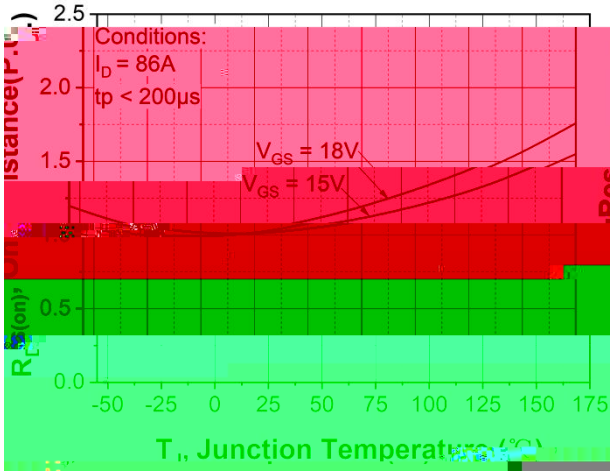



Figure 4. Normalized on-resistance vs. temperature

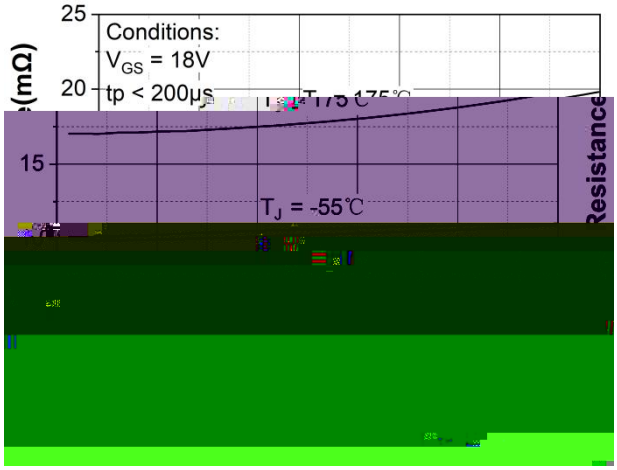



Figure 5. On-resistance vs. drain current for various temperatures

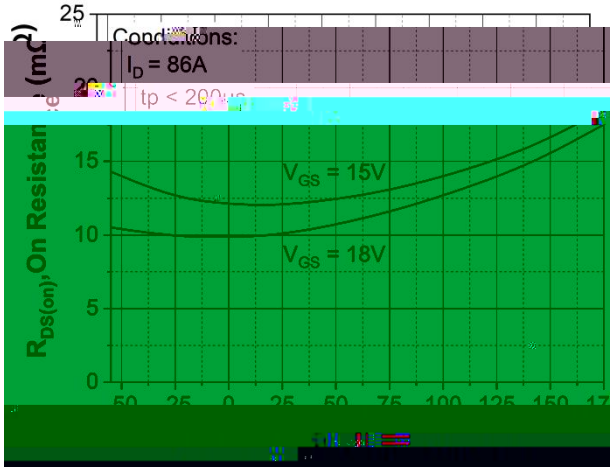



Figure 6. On-resistance vs. temperature for various gate voltages

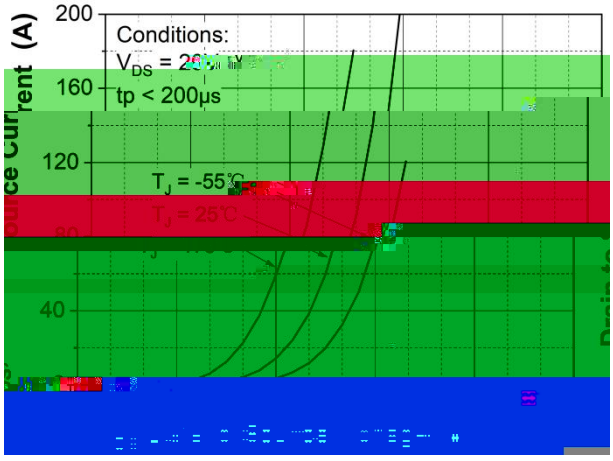



Figure 7. Transfer characteristic for various junction temperatures

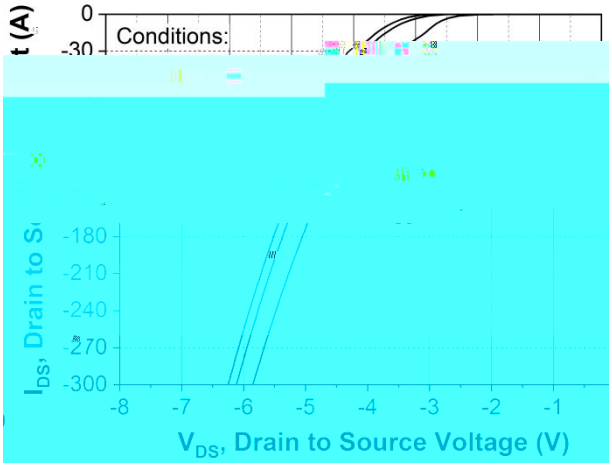



Figure 8. Body diode characteristic at $T_J$ = -55 ºC




Figure 9. Body diode characteristic at $T_J$ = 25 ºC

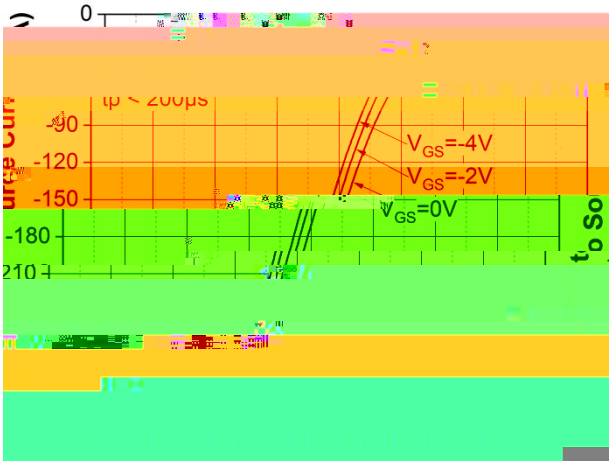



Figure 10. Body diode characteristic at $T_J$ = 175ºC

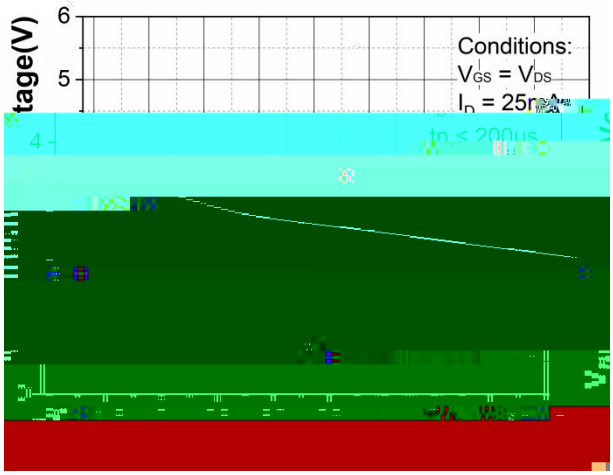



Figure 11. Threshold voltage vs. temperature

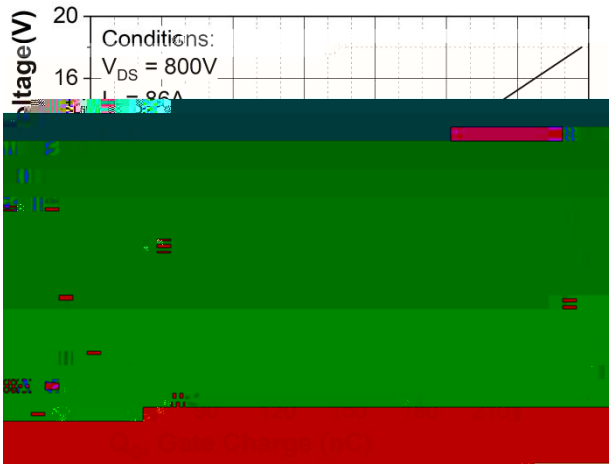



Figure 12. Gate charge characteristic

Figure 13. 3rd quadrant characteristic at $T_J$ = -55 ºC

Figure 14. 3rd quadrant characteristic at $T_J$ 5 m "



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6. Due to technical requirements products may contain dangerous substances. For information on the types in question please contact Sichain office.

7. Except as otherwise explicitly approved by Sichain in a written document signed by authorized representatives of Sichain, Sichain' products may not be used in any applications where a failure of the product or any consequences of the use thereof can reasonably be expected to result in personal injury.

8. For use of our products in applications requiring a high degree of reliability (as exemplified below), please contact and consult with a Sichain representatives, for example but not limited to: transportation equipment,primary communication equipment,traffic lights,fire/crime prevention, safety equipment, medical systems, and power transmission systems.