(Tc = 25°C unless otherwise specified)

| | | | | | | | |
|---|---|---|---|---|---|---|---|
| $V_{(BR)DSS}$ | Drain-source breakdown voltage | 1500 | - | - | V | $V_{GS}$ = 0V, $I_D$ = 100μA | |
| $V_{GS(th)}$ | Gate threshold voltage | 2.3 | 2.8 | 3.6 | V | $V_{DS}$ = $V_{GS}$, $I_D$ = 10mA | Fig.11 |
| | | - | 2.0 | - | V | $V_{DS}$ = $V_{GS}$, $I_D$ = 10mA<br>$T_J$ = 175°C | |
| $I_{DSS}$ | Zero gate voltage drain current | - | 1 | 10 | μA | $V_{DS}$ = 1500V, $V_{GS}$ = 0V | |
| $I_{GSS}$ | Gate source leakage current | - | - | 100 | nA | $V_{GS}$ = 18V, $V_{DS}$ = 0V | |
| $R_{DS(on)}$ | Current drain-source on-state | | | | | | |

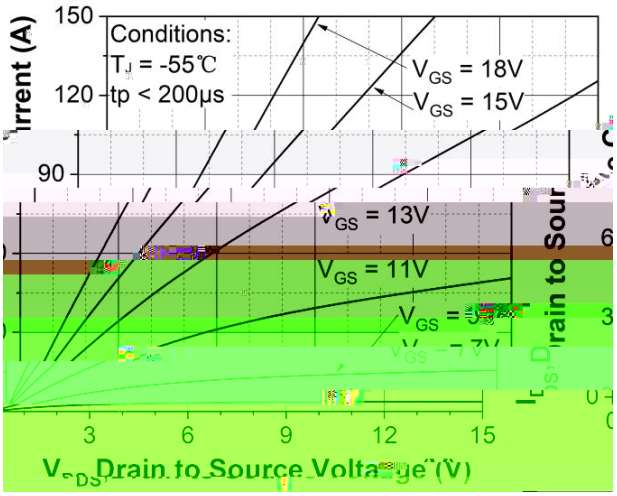



Figure 1. Output characteristics $T_J$ = -55 ºC

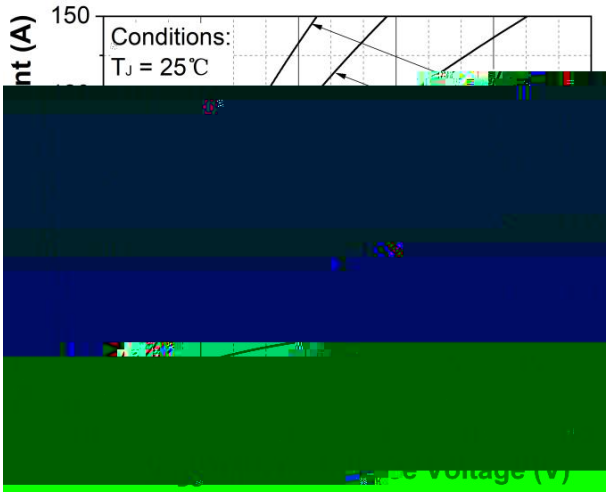



Figure 2. Output characteristics $T_J$ = 25 ºC

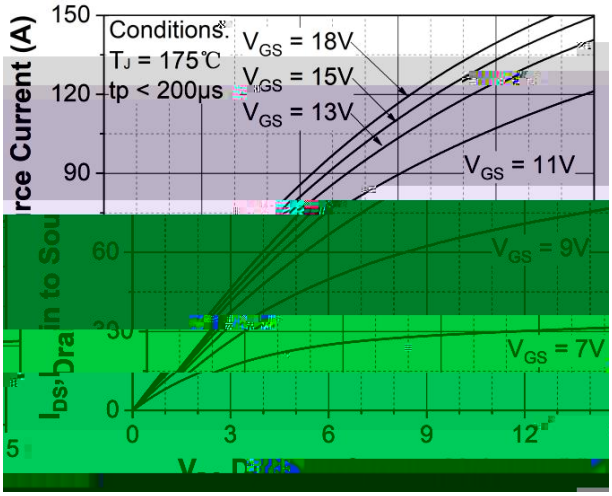



Figure 3. Output characteristics $T_J$ = 175 ºC

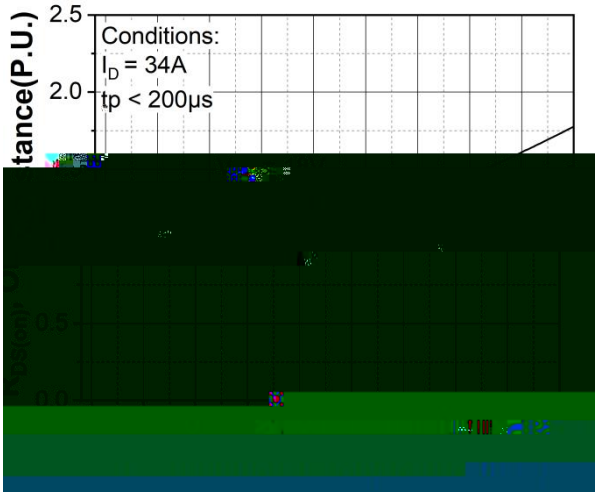



Figure 4. Normalized on-resistance vs. temperature

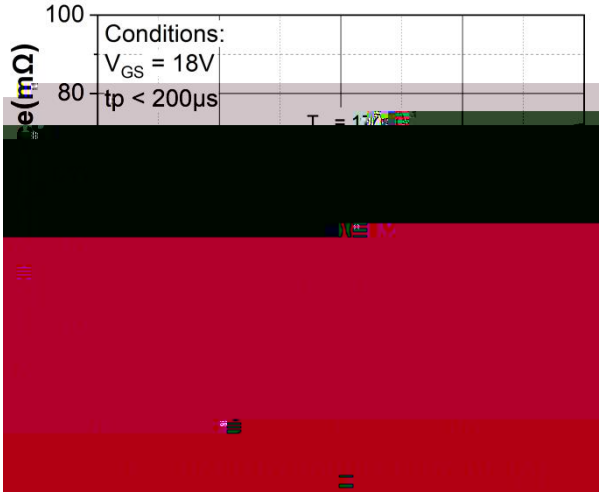



Figure 5. On-resistance vs. drain current for various temperatures

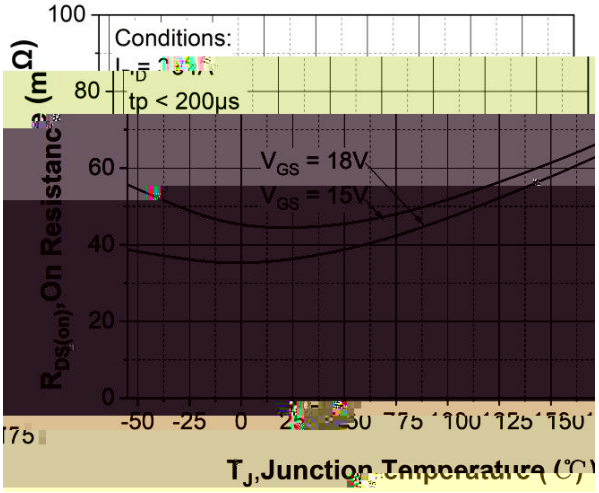



Figure 6. On-resistance vs. temperature for various gate voltages

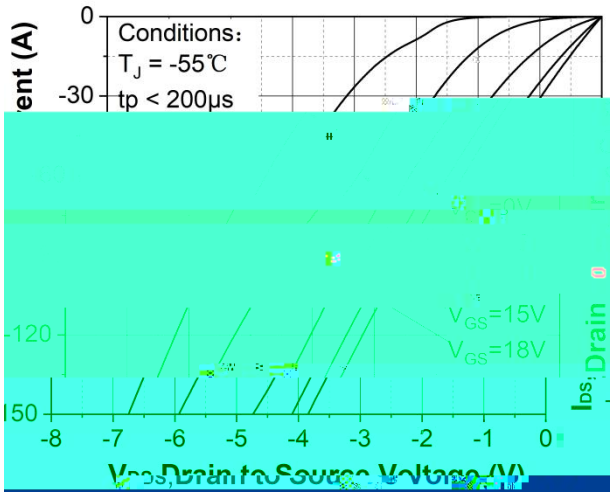



Figure 13. 3rd quadrant characteristic at $T_J$ = -55 ºC

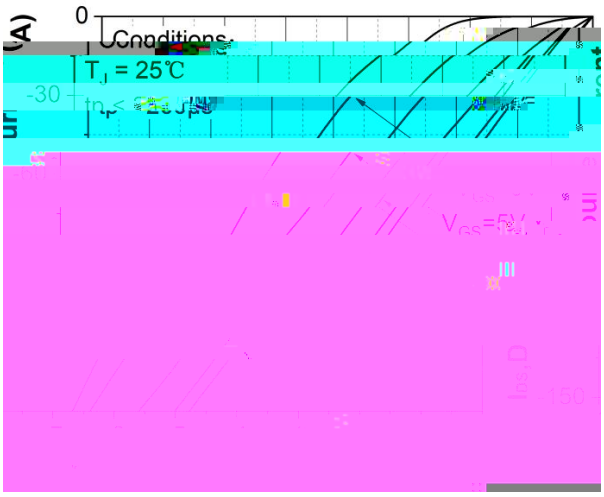



Figure 14. 3rd quadrant characteristic at $T_J$ = 25 ºC

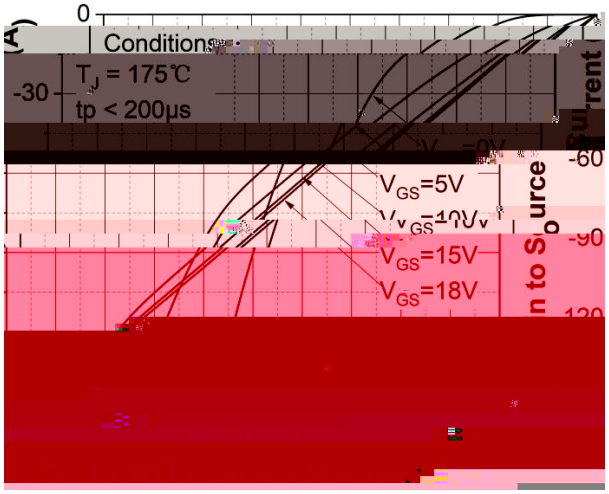



Figure 15. 3rd quadrant characteristic at $T_J$ = 175 ºC

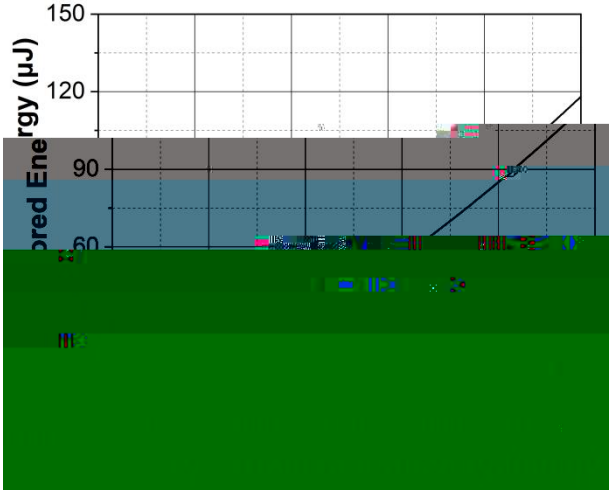


Figure 16. Output capacitor stored energy

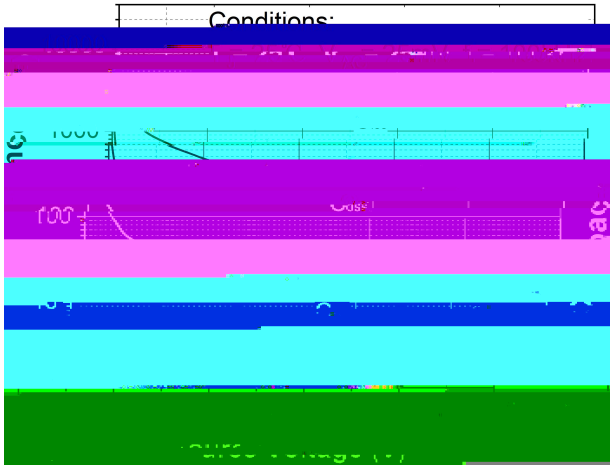



Figure 17. Capacitances vs. drain-source voltage (0 - 250V)

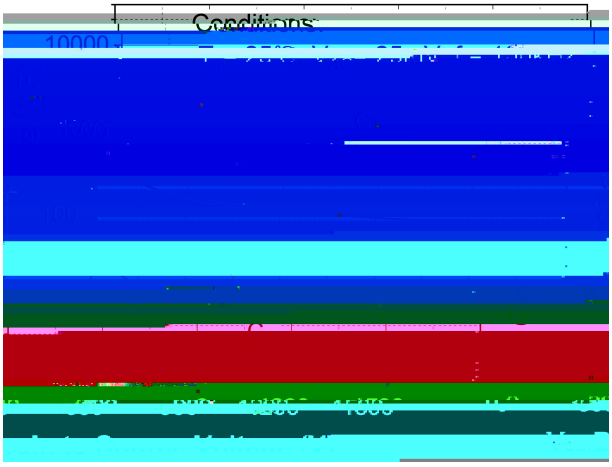



Figure 18. Capacitances vs. drain-source voltage (0 - 1500V)

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.