



N-Channel Enhancement Mode Field Effect Transistor

Product Summary

V_{DS}

1



YJG50G10A

Typical Electrical and Thermal Characteristics Diagrams

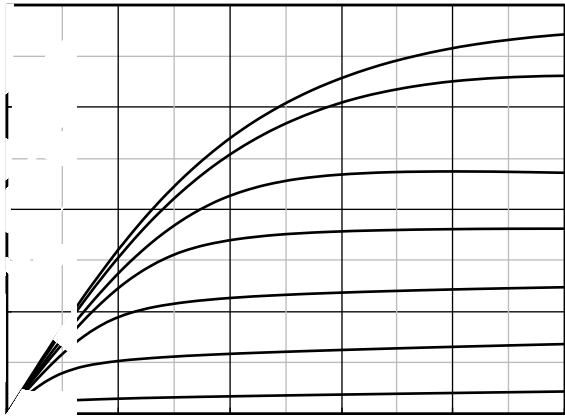


Figure 1. Output Characteristics

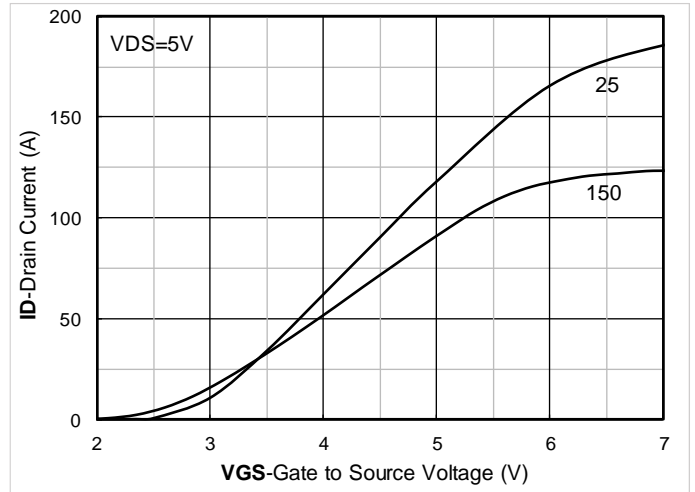


Figure 2. Transfer Characteristics

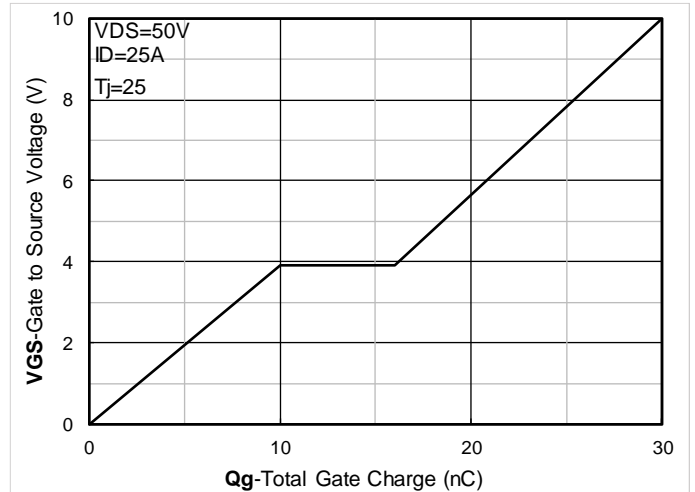


Figure 3. Capacitance Characteristics

Figure 4. Gate Charge

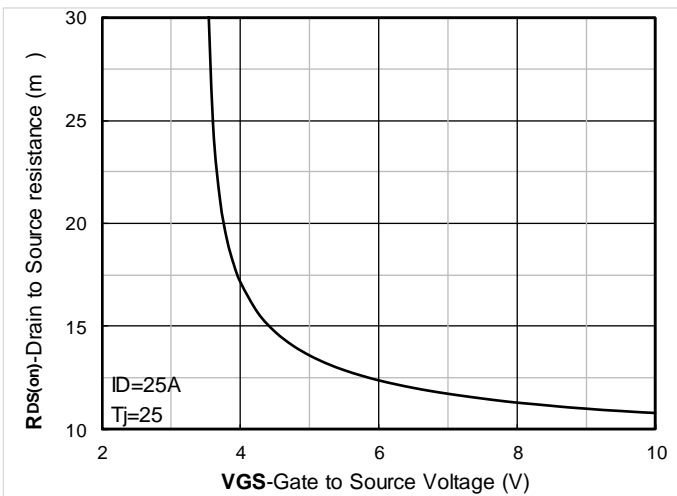


Figure 5. On-Resistance vs Gate to Source Voltage

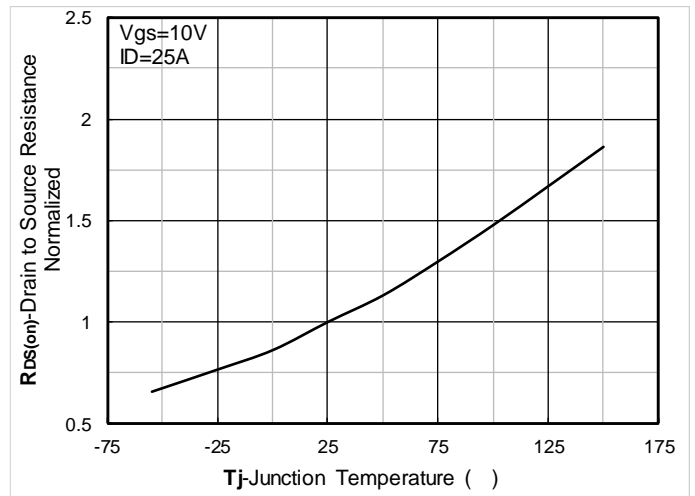


Figure 6. Normalized On-Resistance

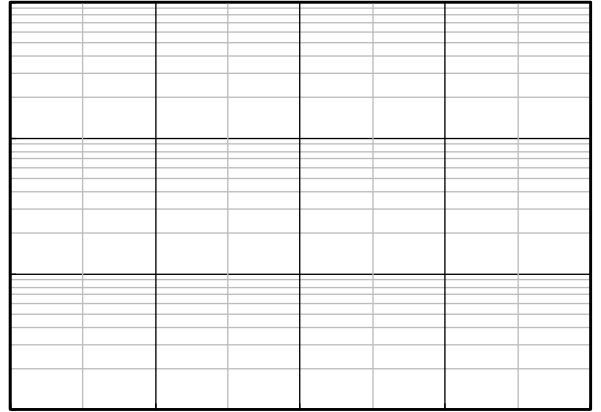
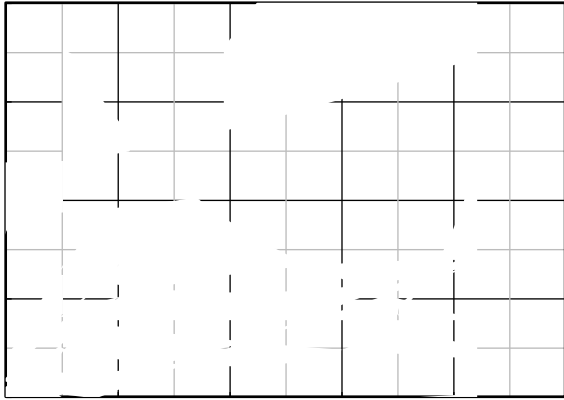


Figure 7. RDS(

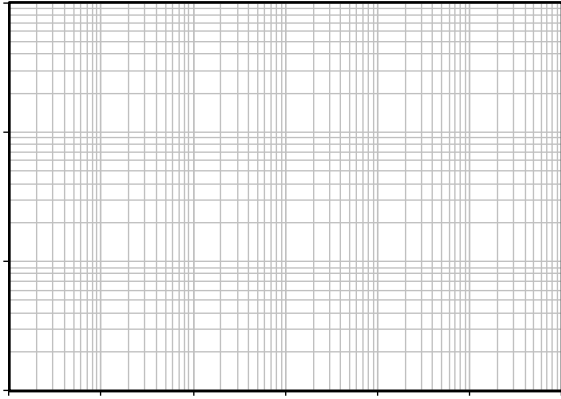


Figure 13. Maximum Transient Thermal Impedance

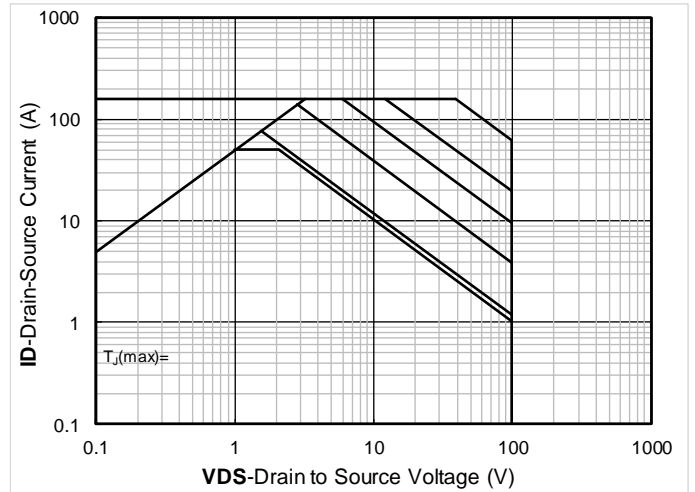


Figure 14. Safe Operation Area

Test Circuits & Waveforms

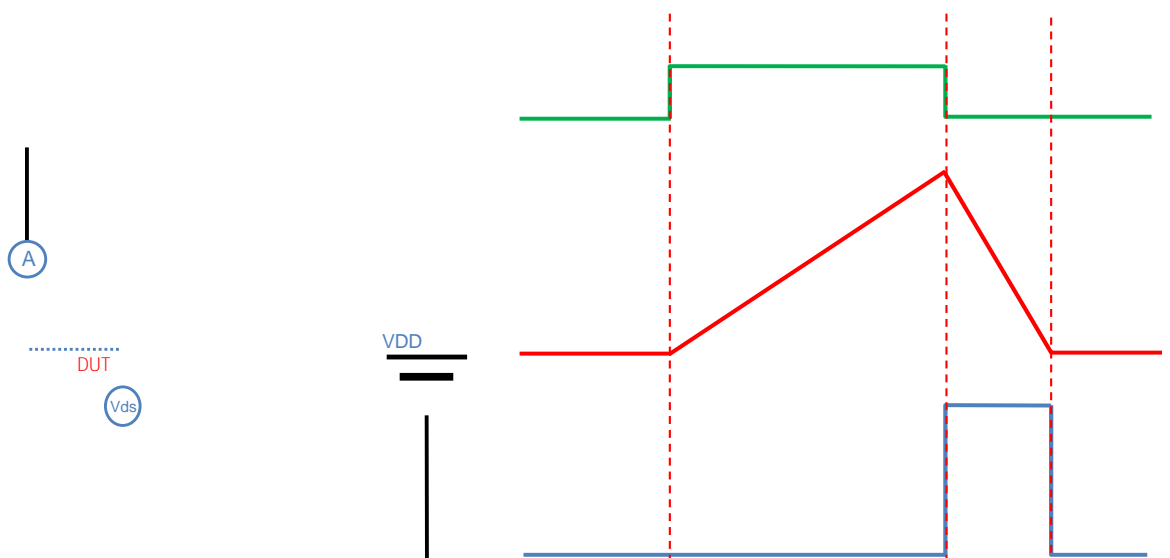
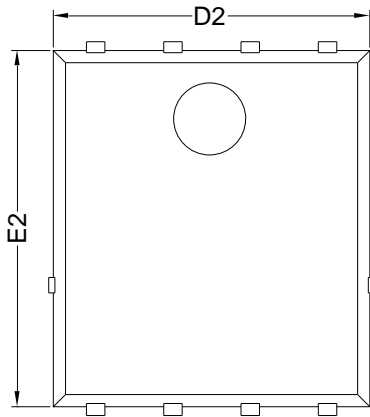


Figure A. Unclamped Inductive Switching (UIS) Test Circuit & Waveform

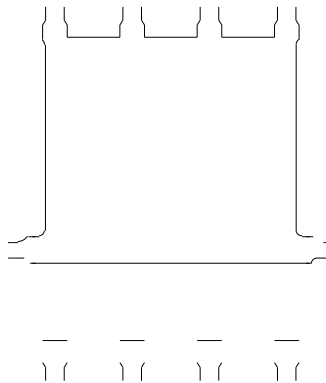


YJG50G10A

PDFN5060-8L-B-1.1MM Package information



Top View



Bottom View

Side View

| SYMBOL | MILLIMETER | | |
|--------|------------|------|------|
| | MIN | NOM | MAX |
| D | 5.15 | 5.35 | 5.55 |
| E | 5.95 | 6.15 | 6.35 |
| A | 1.00 | 1.10 | 1.20 |
| A1 | 0.254 BSC | | |
| A2 | | | 0.10 |
| D1 | 3.92 | 4.12 | 4.32 |
| E1 | 3.52 | 3.72 | 3.92 |
| D2 | 5.00 | 5.20 | 5.40 |
| E2 | 5.66 | 5.86 | 6.06 |
| E3 | 0.254 REF | | |
| E4 | 0.21 REF | | |
| L1 | 0.56 | 0.66 | 0.76 |
| L2 | 0.50 BSC | | |
| b | 0.31 | 0.41 | 0.51 |
| e | 1.27 BSC | | |

Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.10 mm.
3. The pad layout is for reference purposes only.



YJG50G10A

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <http://www.21yangjie.com> , or consult your nearest Yangjie's sales office for further assistance.