



YJN280G10H

N-Channel Enhancement Mode Field Effect Transistor

Product Summary

| | |
|----------------------------------|------|
| V_{DS} | 100V |
| I_D | 280A |
| $R_{DS(ON)}$ (at $V_{GS}=10V$) | 2.6m |
| $R_{DS(ON)}$ (at $V_{GS}=6V$) | 3.0m |
| 100% EAS Tested | |
| 100% V_{DS} Tested | |

General Description

Split Gate Trench MOSFET technology



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Electrical Characteristics ($T_J=25$ unless otherwise noted)

| Parameter | Symbol | Conditions | Min | Typ | Max | Units |
|--------------------------------|------------|---------------------------|-----|-----|-----|-------|
| Static Parameter | | | | | | |
| Drain-Source Breakdown Voltage | BV_{DSS} | $V_{GS}=0V, I_D=250\mu A$ | | | | |



Typical Electrical and Thermal Characteristics Diagrams

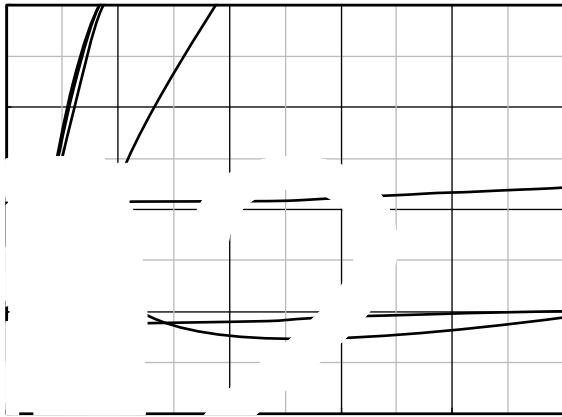


Figure 1. Output Characteristics

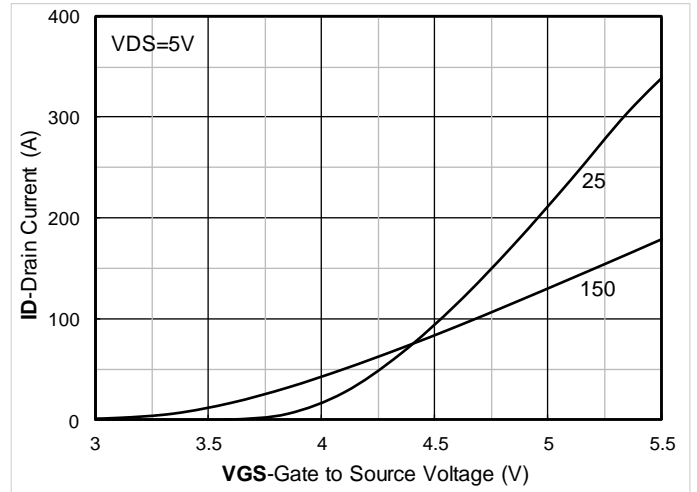


Figure 2. Transfer Characteristics

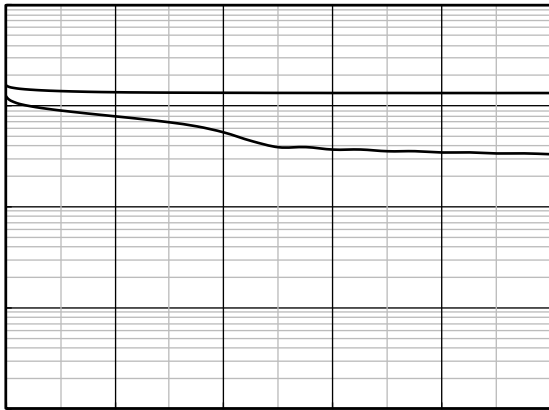


Figure 3. Capacitance Characteristics

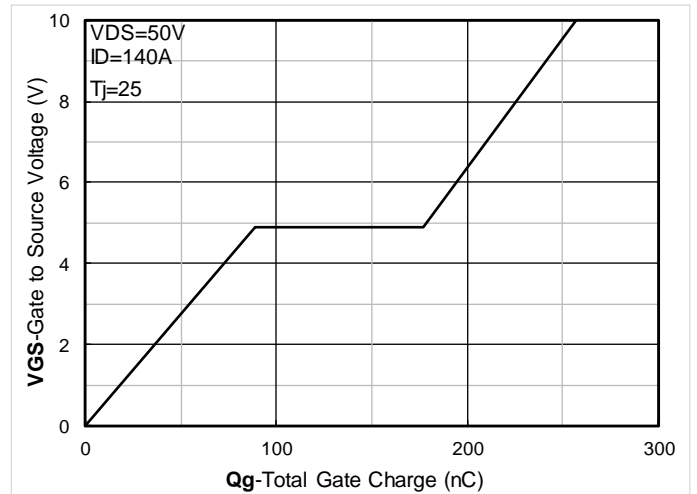


Figure 4. Gate Charge

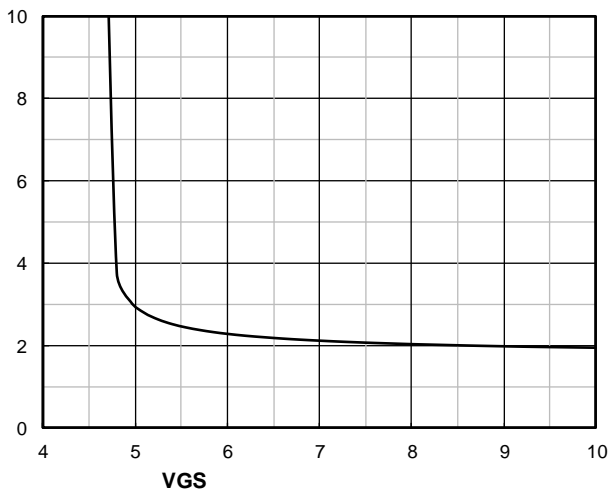


Figure 5. On-Resistance vs Gate to Source Voltage

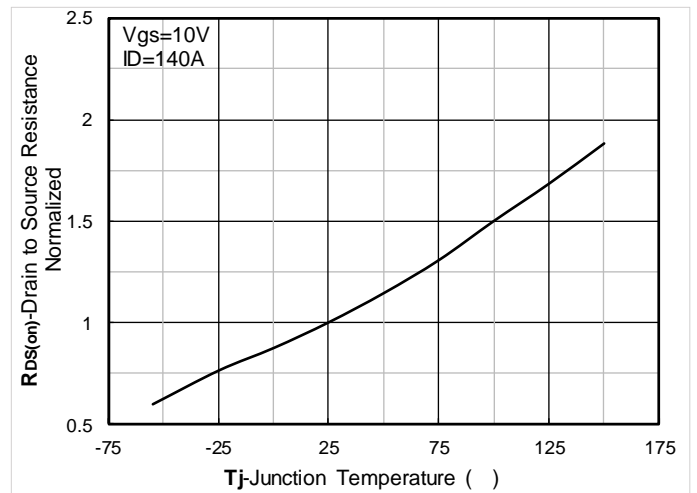


Figure 6. Normalized On-Resistance

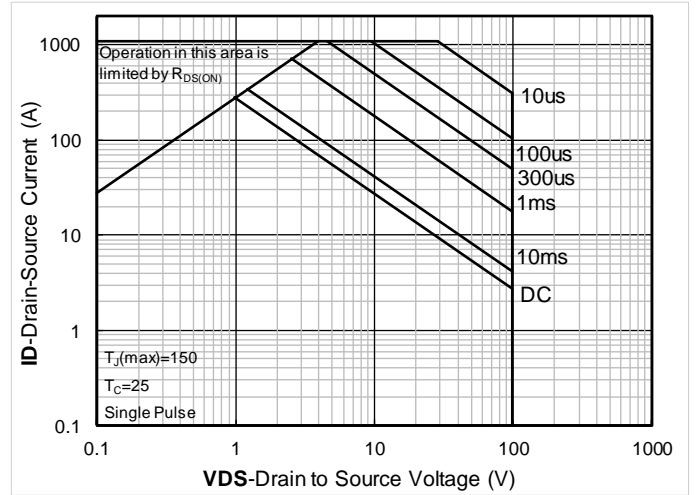


Figure 13. Maximum Transient Thermal Impedance

Figure 14. Safe Operation Area

Test Circuits & Waveforms

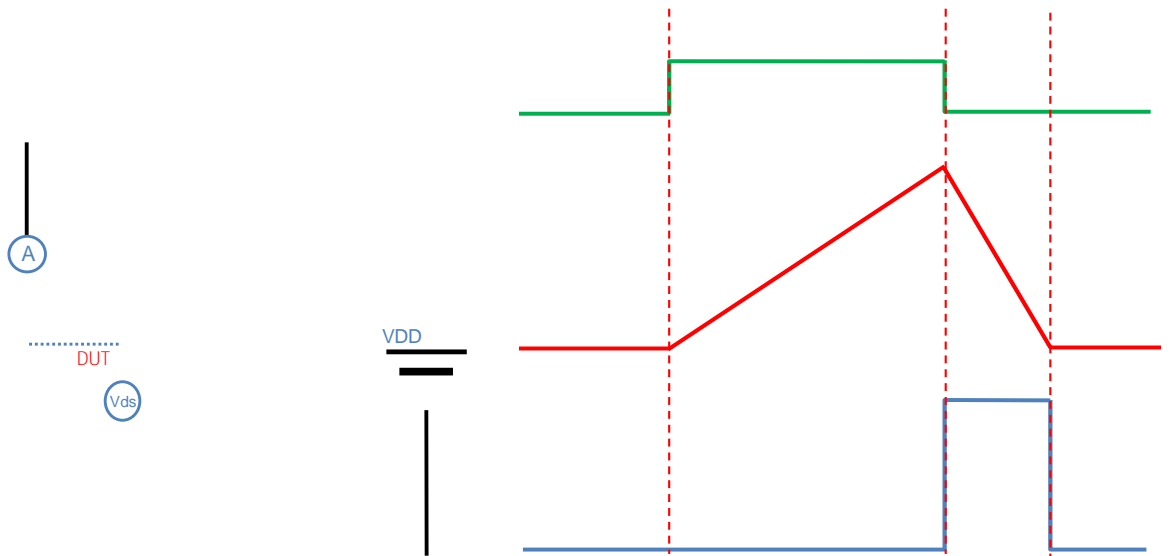


Figure A. Unclamped Inductive Switching (UIS) Test Circuit & Waveform

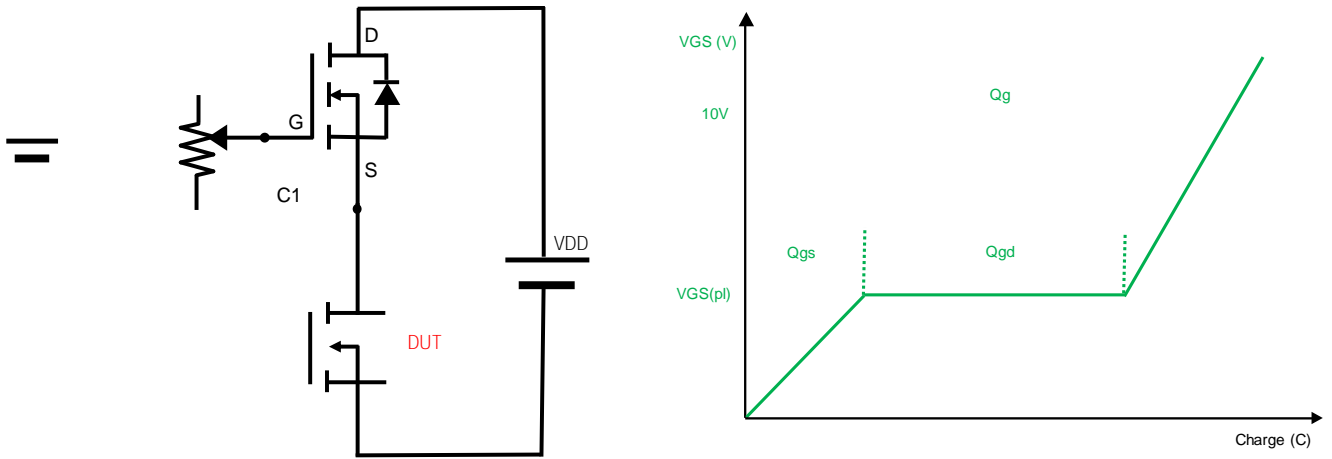


Figure B. Gate Charge Test Circuit & Waveform



Figure C. Resistive Switching Test Circuit & Waveform

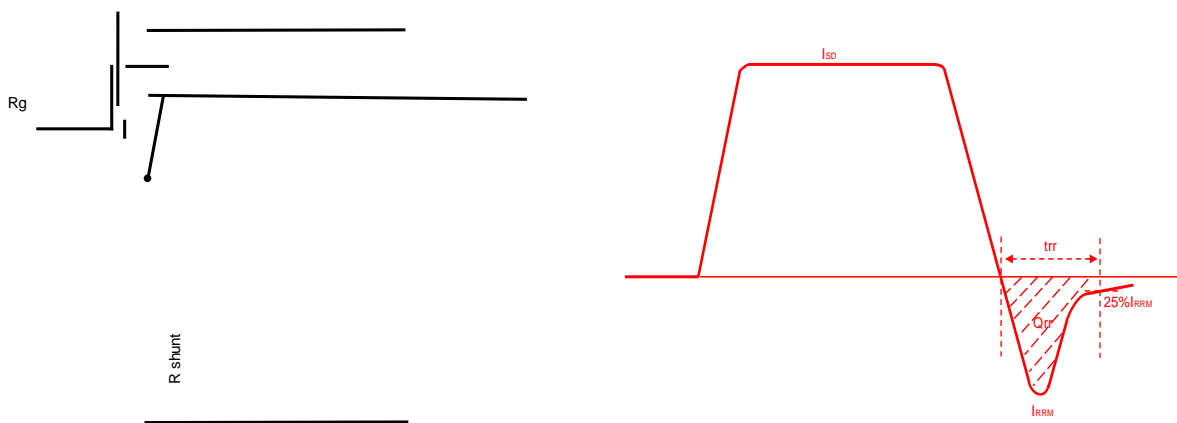


Figure D. Diode Recovery Test Circuit & Waveform



TO-247AB Package information

| TO-247AB | | |
|----------|------|------|
| Dim | Min | Max |
| A | 4.80 | 5.20 |



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Disclaimer

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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.

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