



N-Channel Enhancement Mode Field Effect Transistor

Product Summary

V_{DS}	100V
I_D	1.8A
$R_{DS(ON)}$ (at $V_{GS}=10V$)	140m
$R_{DS(ON)}$ (at $V_{GS}=4.5V$)	180m

General Description

Split Gate Trench MOSFET technology
Excellent package for heat dissipation
High density cell design for low $R_{DS(ON)}$
Moisture Sensitivity Level 1
Epoxy Meets UL 94 V-0 Flammability Rating
Halogen Free

Applications

DC-DC convertor
Power management functions

Absolute Maximum Ratings ($T_J=25$



YJL140G10ALJ

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



YJL140G10ALJ

Typical Electrical and Thermal Characteristics Diagrams

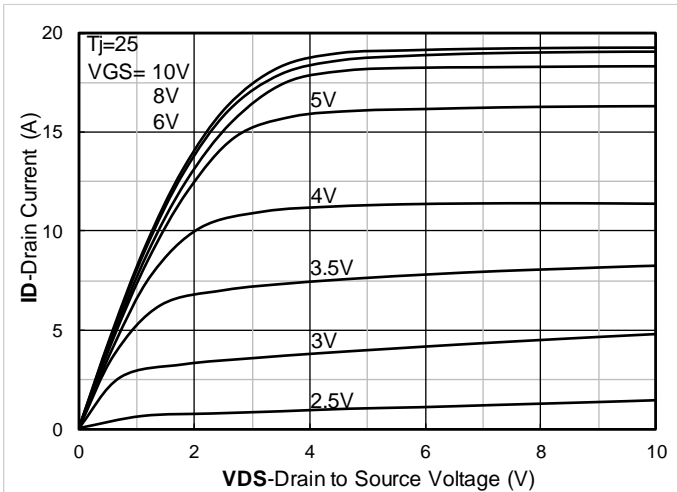


Figure 1. Output Characteristics

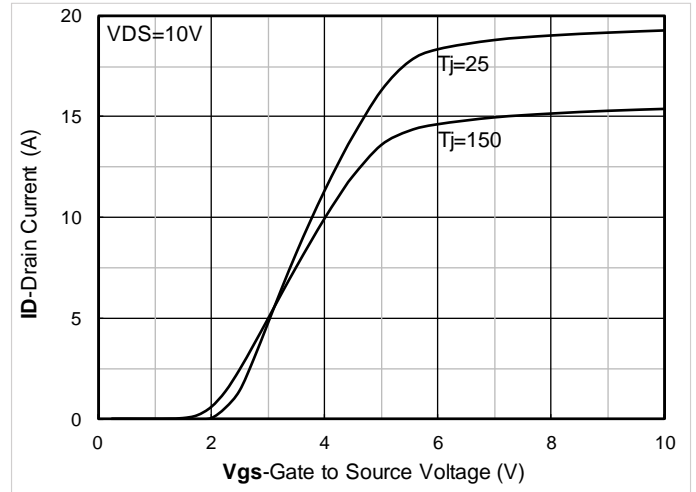


Figure 2. Transfer Characteristics

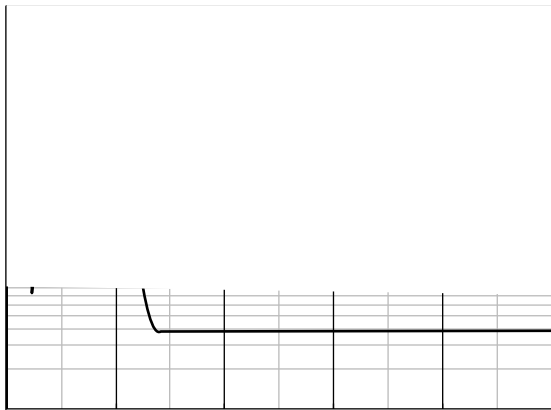


Figure 3. Capacitance Characteristics

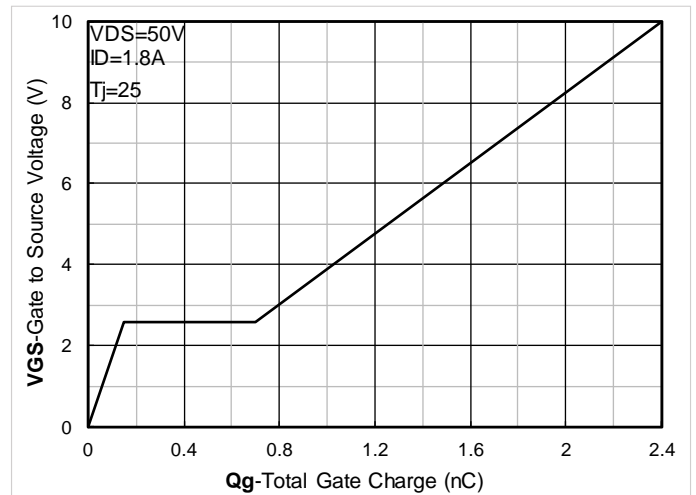


Figure 4. Gate Charge

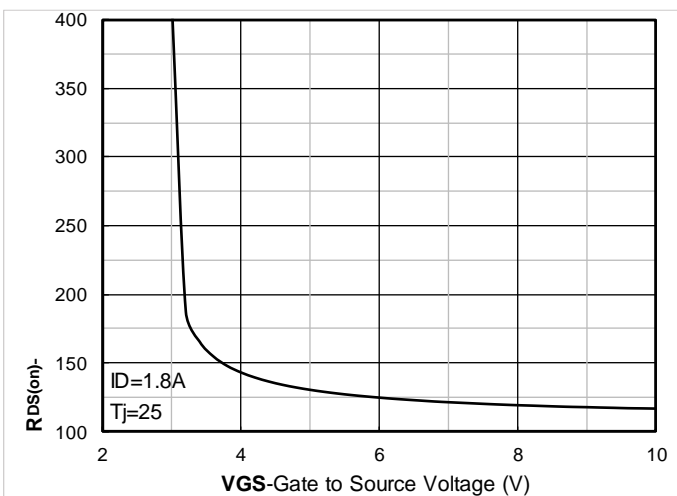


Figure 5. On-Resistance vs Gate to Source Voltage

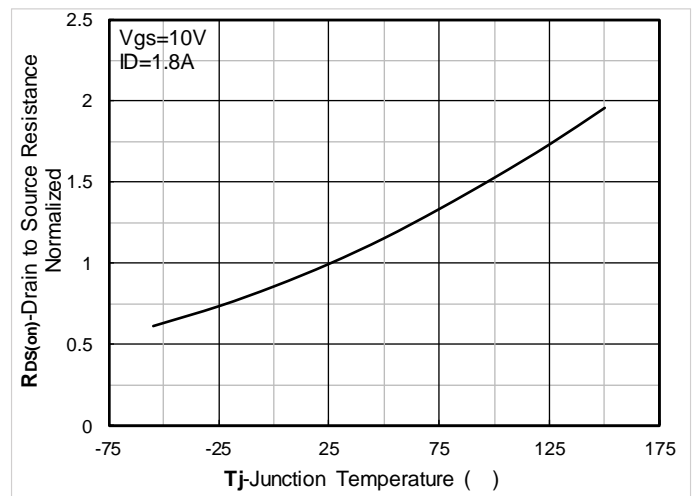


Figure 6. Normalized On-Resistance

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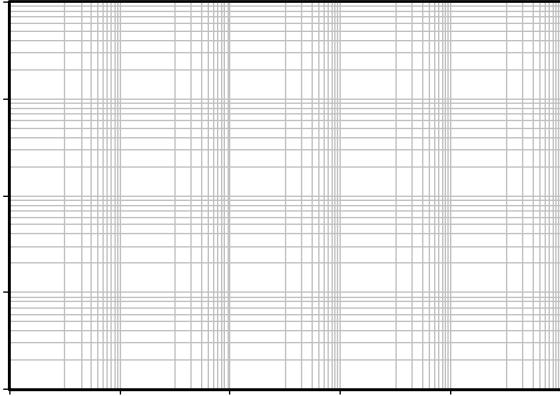


Figure 13. Maximum Transient Thermal Impedance

Figure 14. Safe Operation Area

Test Circuits & Waveforms

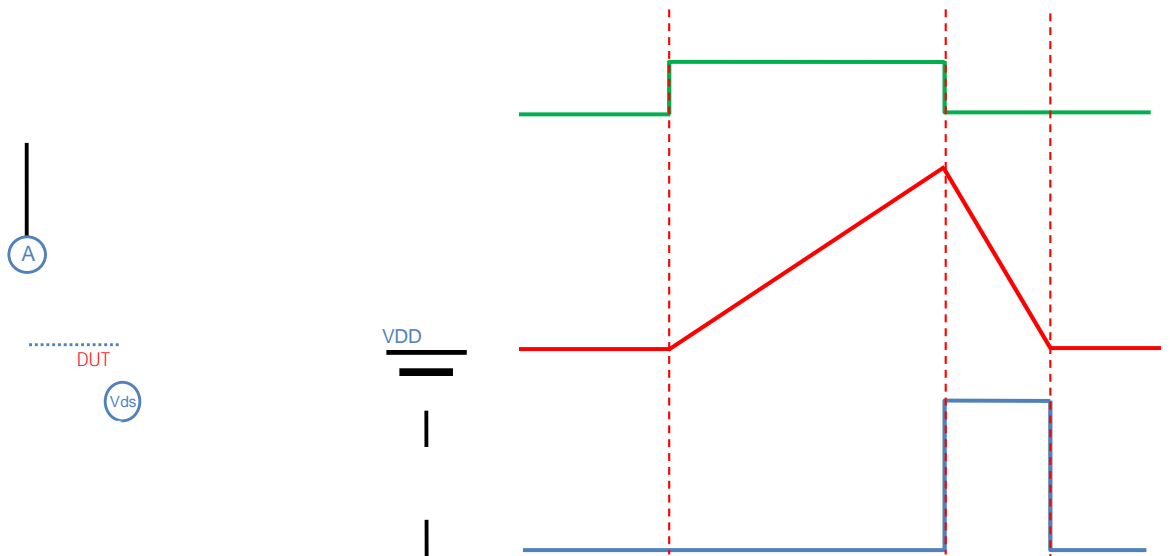


Figure A. Unclamped Inductive Switching (UIS) Test Circuit & Waveform

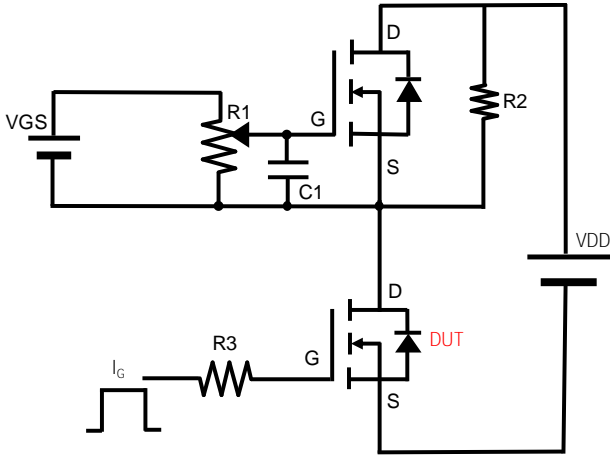


Figure B. Gate Charge Test Circuit & Waveform

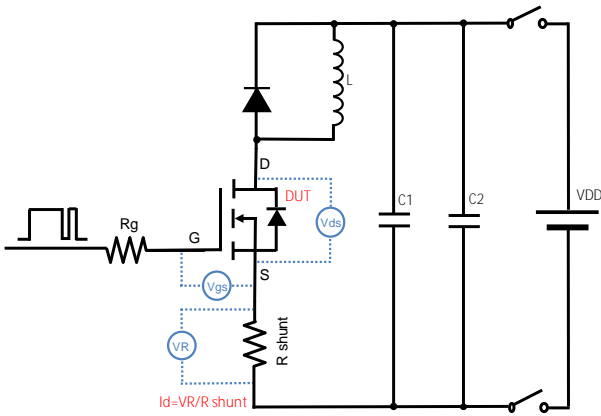


Figure C. Resistive Switching Test Circuit & Waveform

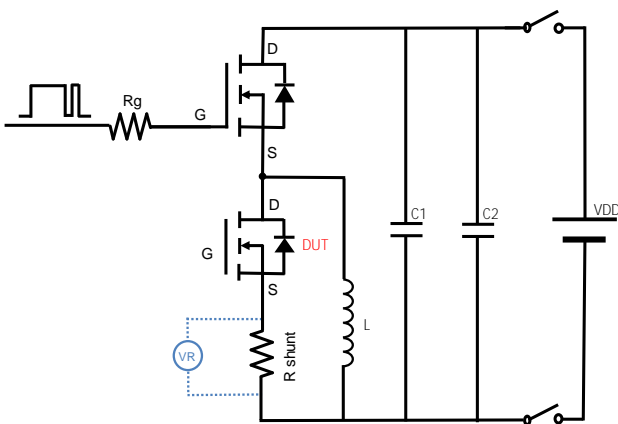


Figure D. Diode Recovery Test Circuit & Waveform



SOT-23-3L Package information

UNIT mm



YJL140G10ALJ

Disclaimer

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