



YJB240G10M

N-Channel Enhancement Mode Field Effect Transistor

Product Summary

V_{DS}	100V
I_D	240A
$R_{DS(ON)}$ (at $V_{GS}=10V$)	2.6m
$R_{DS(ON)}$ (at $V_{GS}=6V$)	3.1m
100% EAS Tested	
100% V_{DS} Tested	

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

Load switch
Battery management
Solar

Absolute Maximum Ratings ($T_A=25$ unless otherwise noted)

Parameter	Symbol	Limit	Unit
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Drain-source Voltage

V



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

Parameter	Symbol	Conditions	Min	Typ	Max	Units
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Typical Electrical and Thermal Characteristics Diagrams

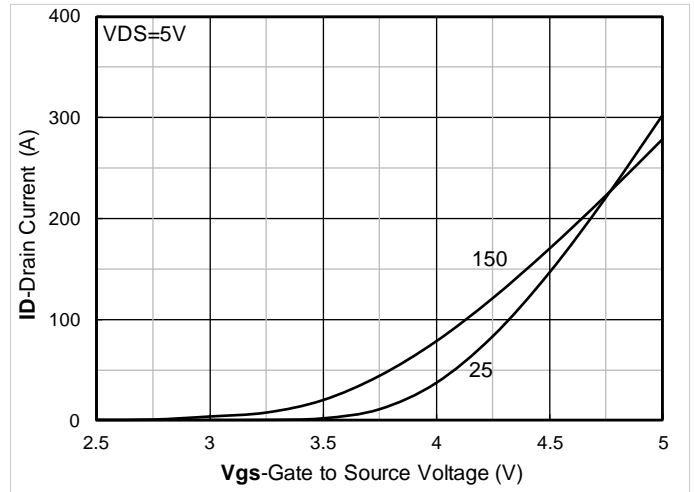
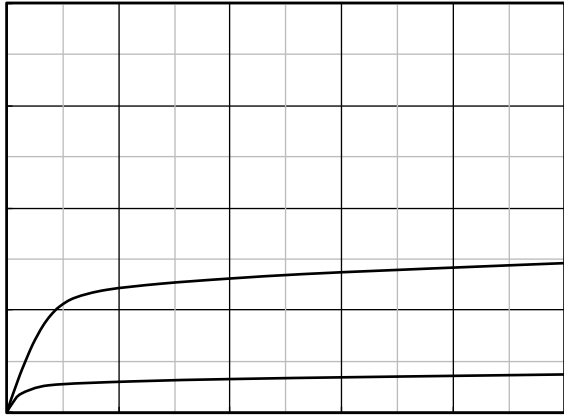


Figure 1. Output Characteris 38.0/2s 38ms

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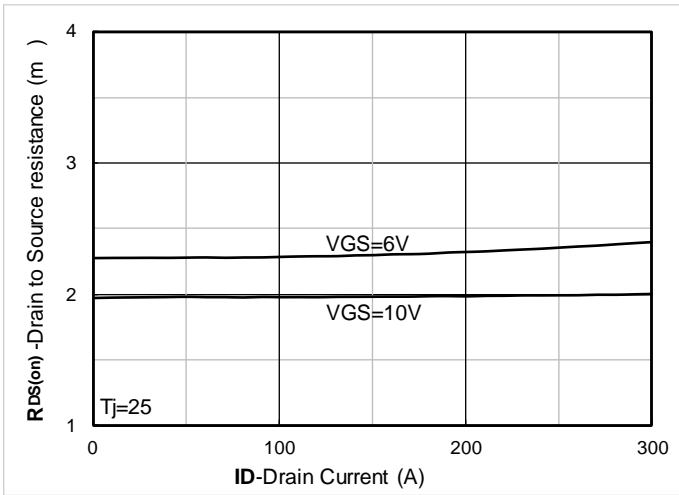


Figure 7. RDS(on) VS Drain Current

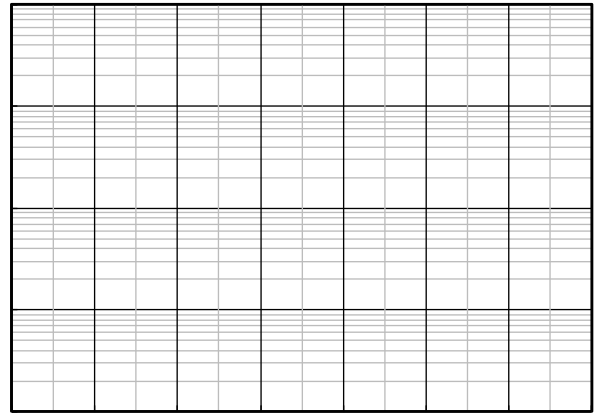


Figure 8. Forward characteristics of reverse diode

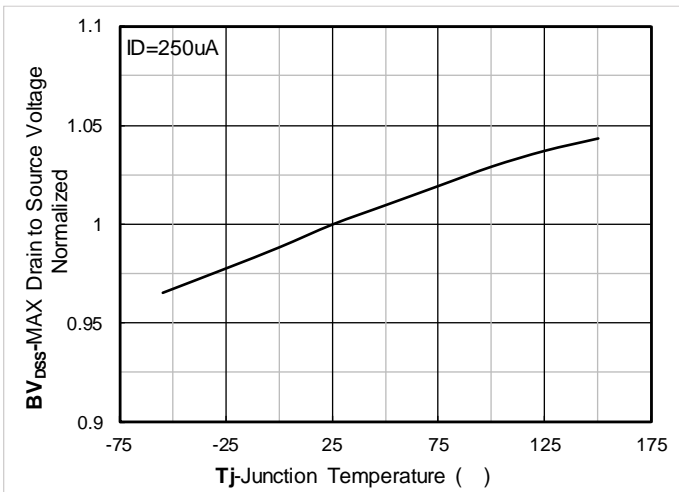


Figure 9. Normalized breakdown voltage

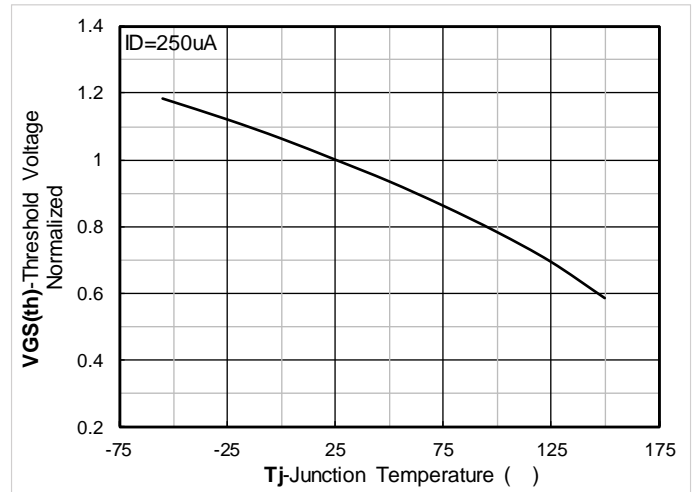


Figure 10. Normalized Threshold voltage

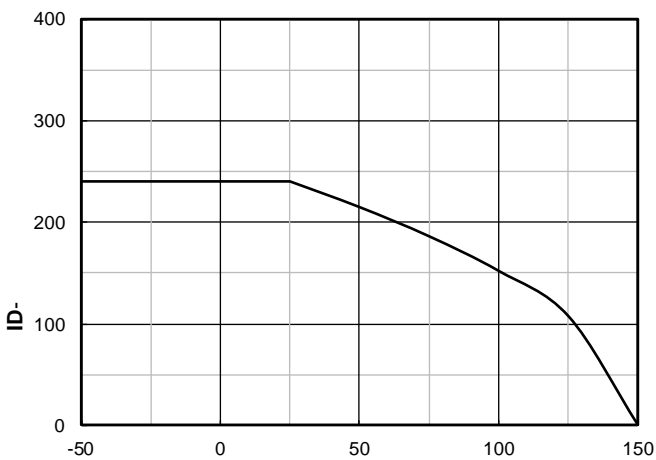


Figure 11. Current dissipation

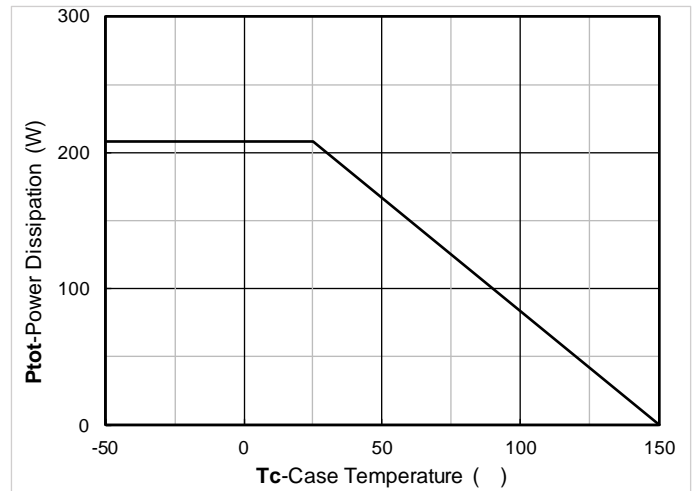


Figure 12. Power dissipation

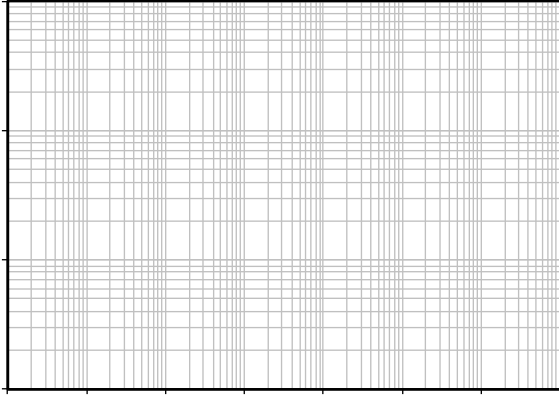


Figure 13. Maximum Transient Thermal Impedance

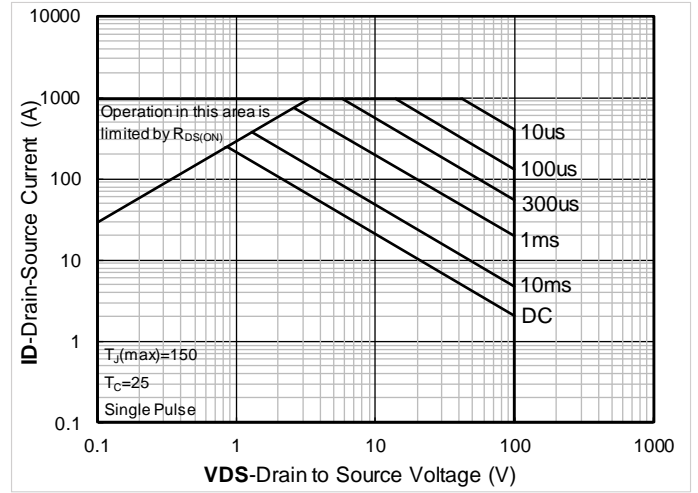


Figure 14. Safe Operation Area

Test Circuits & Waveforms

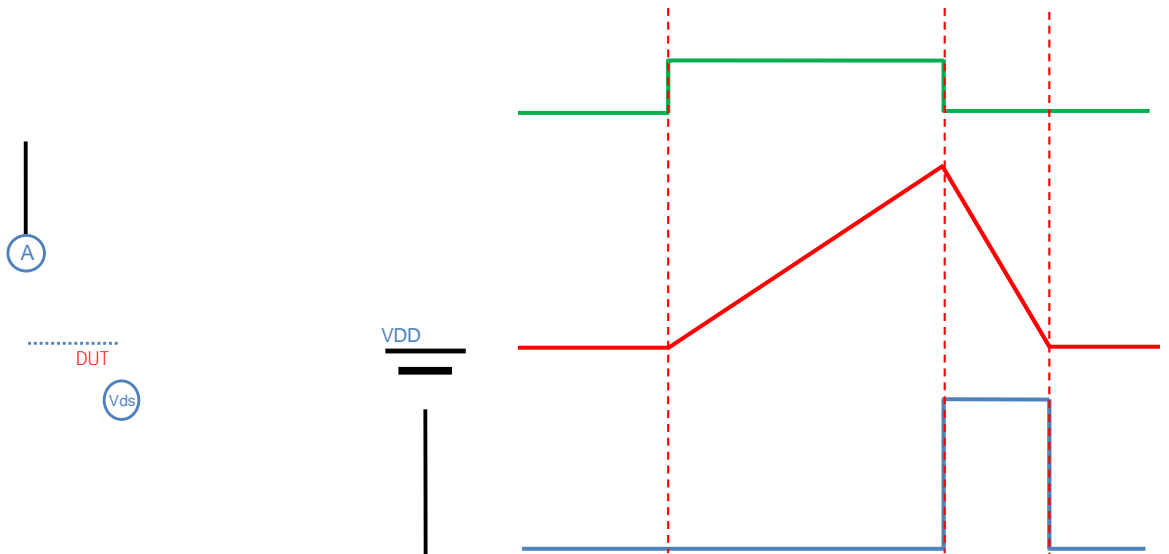
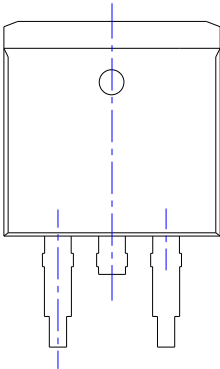


Figure A. Unclamped Inductive Switching (UIS) Test Circuit & Waveform



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TO-263-B Package information

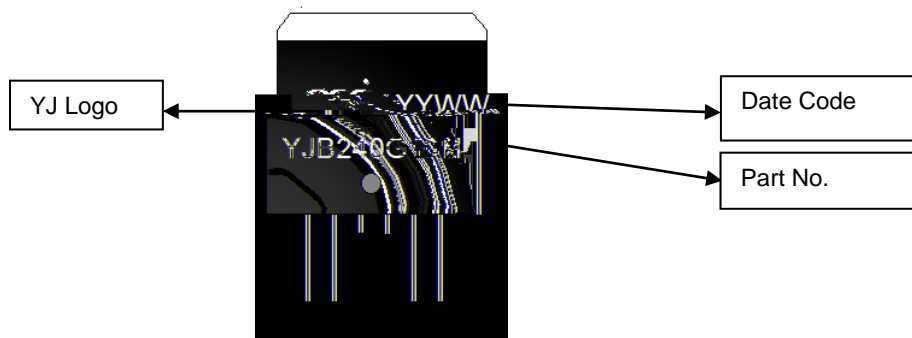


NOTE:

- 1.PACKAGE BODY SIZES EXCLUDE MOLD FLASH AND GATE BURRS.
- 2.TOLERANCE 0.1mm UNLESS OTHERWISE SPECIFIED.
- 3.THE PAD LAYOUT IS FOR REFERENCE PURPOSES ONLY.

UNIT: mm

Marking Information



Note

- 1. All marking is at middle of the product body
- 2. All marking is in laser printing
- 3. YJB240G10M is part no., YYWW is date code, "YY" is year, "WW" is week
- 4. Body color: Black



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