



## N-Channel Enhancement Mode Field Effect Transistor

### Product Summary

$V_{DS}$	150V
$I_D$	90A
$R_{DS(ON)}$ (at $V_{GS}=10V$ )	11.8m
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  $R_{DS(ON)}$   
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Epoxy Meets UL 94 V-0 Flammability Rating  
Halogen Free

### Applications

Power switching application  
Uninterruptible





# YJB90G15H

## Typical Electrical and Thermal Characteristics Diagrams

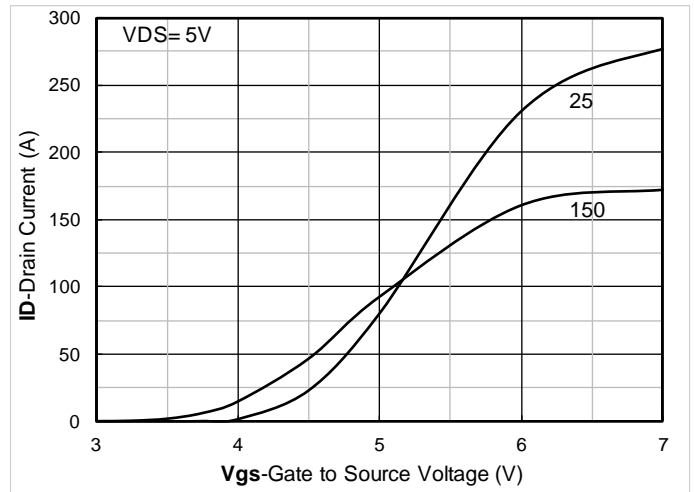


Figure 2. Transfer Characteristics

Figure 1. Output Characteristics

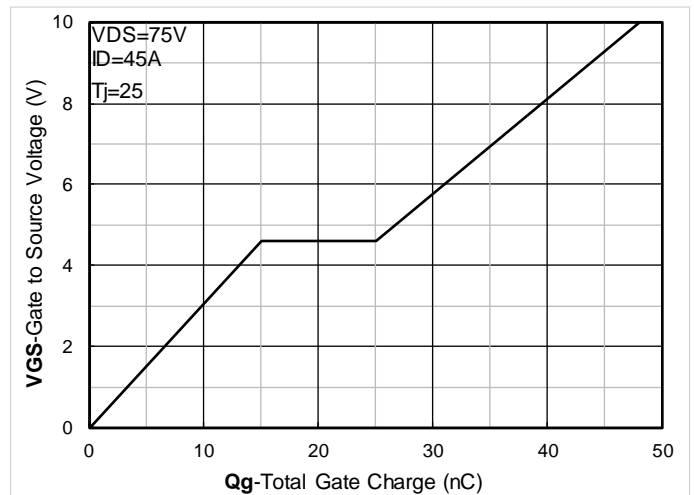


Figure 4. Gate Charge

Figure 3. Capacitance Characteristics

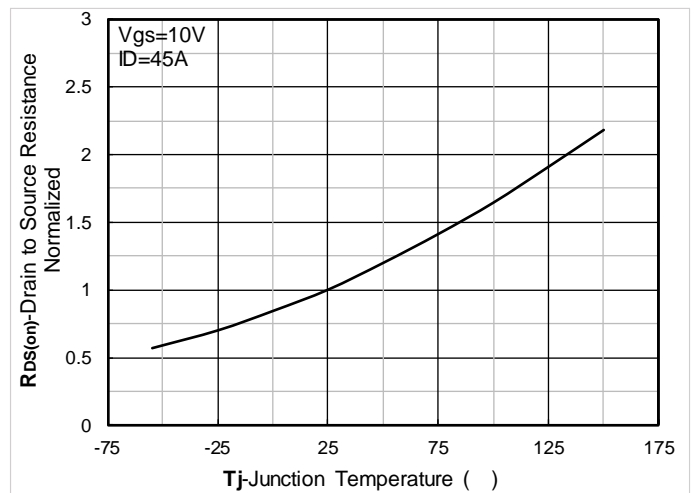


Figure 6. Normalized On-Resistance

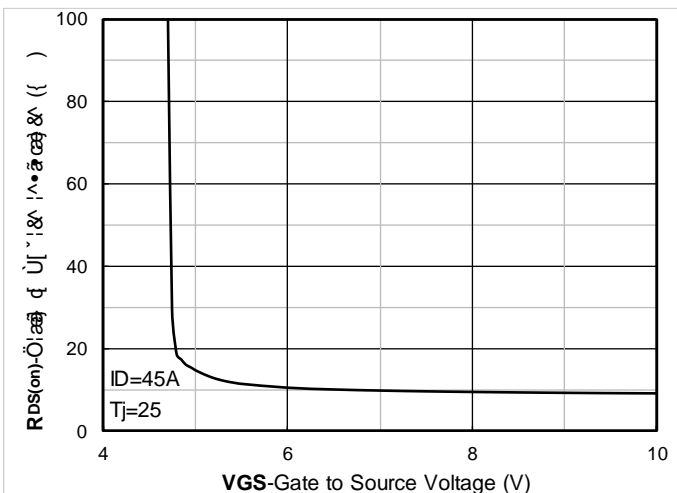


Figure 5. On-Resistance vs Gate to Source Voltage



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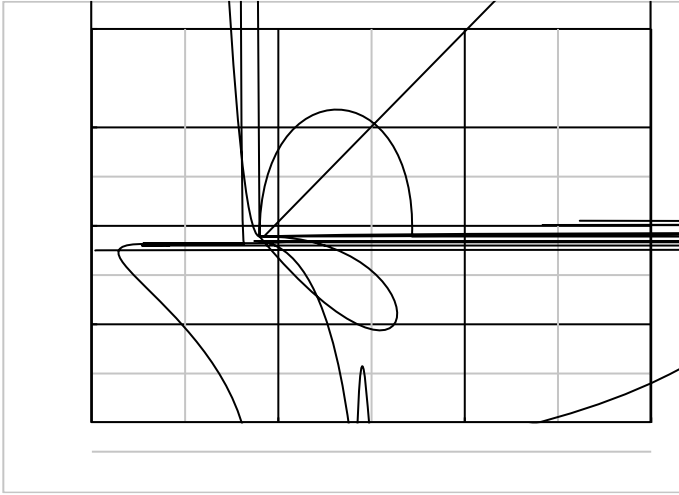


Figure 7.  $R_{DS(on)}$  VS Drain Current

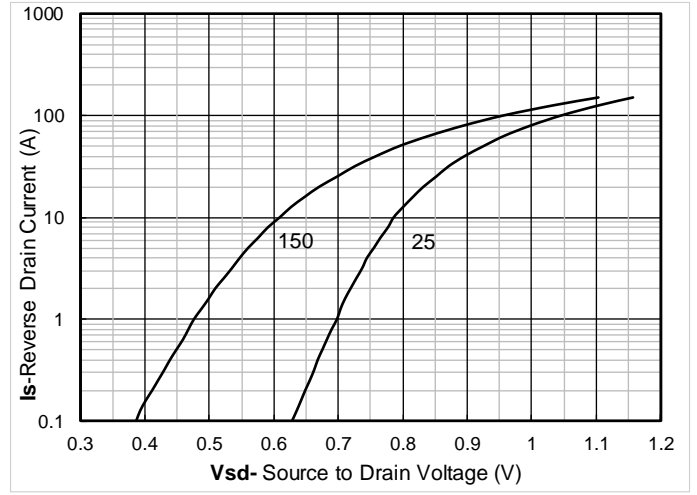


Figure 8. Forward characteristics of reverse diode

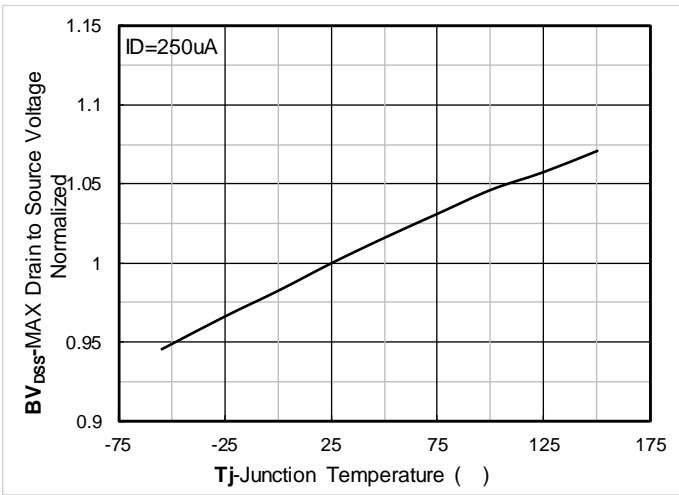


Figure 9. Normalized breakdown voltage

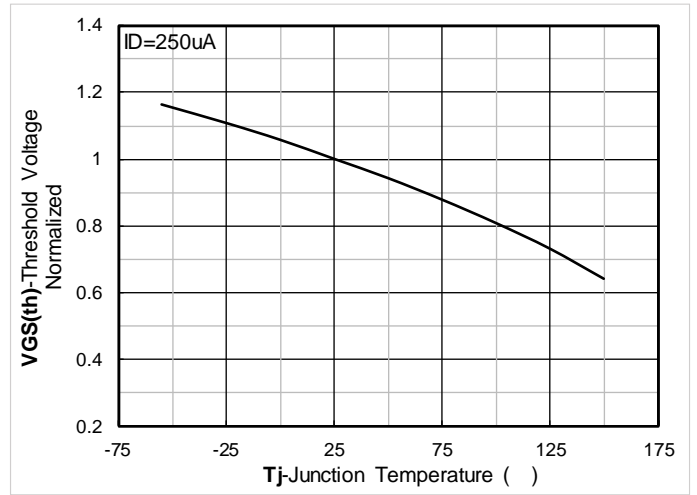


Figure 10. Normalized Threshold voltage

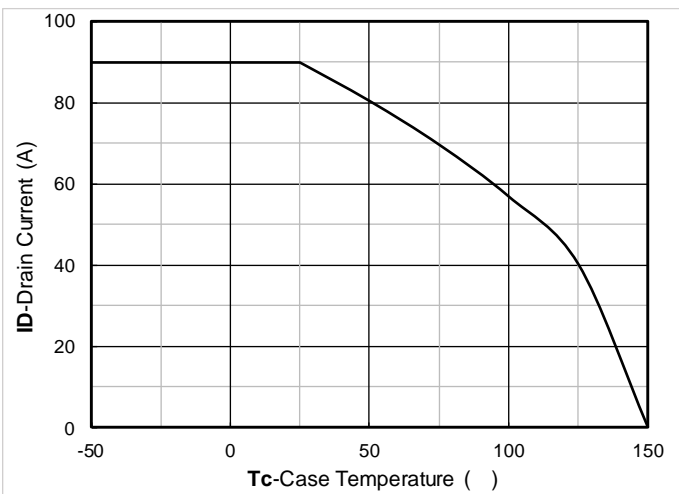


Figure 11. Current dissipation

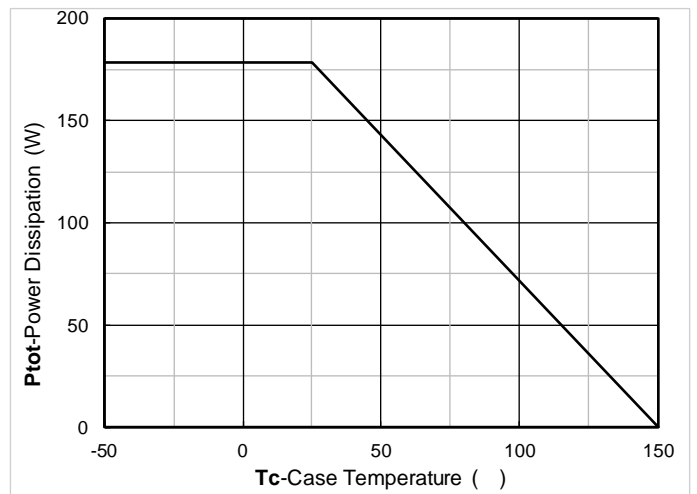


Figure 12. Power dissipation



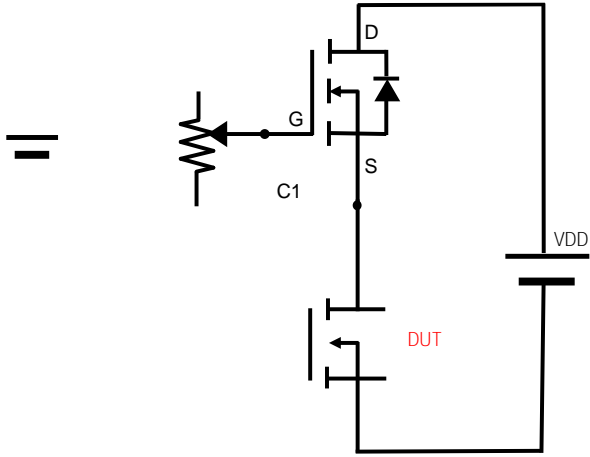


Figure B. Gate Charge Test Circuit & Waveform

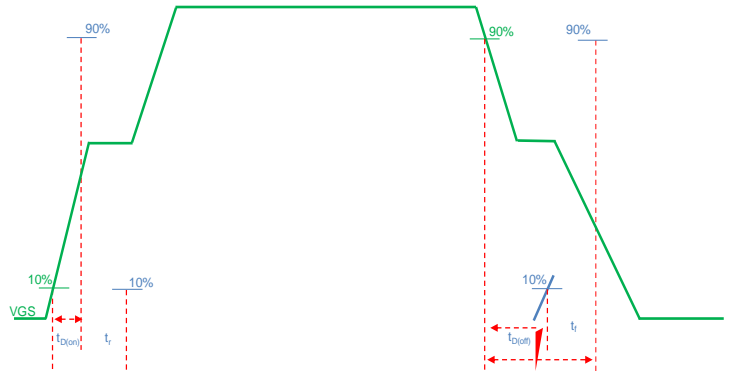
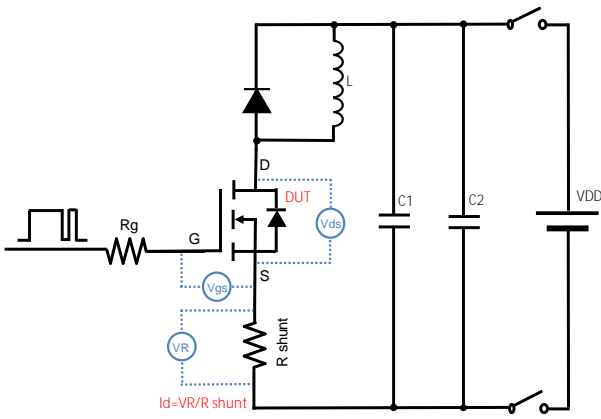


Figure C. Resistive Switching Test Circuit & Waveform

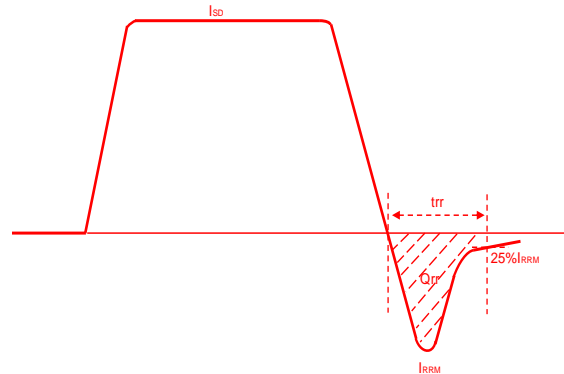
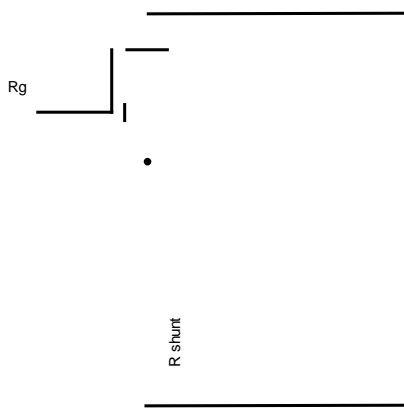


Figure D. Diode Recovery Test Circuit & Waveform



