



## N-Channel Enhancement Mode Field Effect Transistor

### Product Summary

$V_{DS}$	100V
$I_D$	60A
$R_{DS(ON)}$ ( at $V_{GS}=10V$ )	12m
$R_{DS(ON)}$ ( at $V_{GS}=4.5V$ )	15m



# YJR60G10A

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

Parameter	Symbol	Conditions	Min	Typ	Max	Units
<b>Static Parameter</b>						
Drain-Source Breakdown Voltage	$BV_{DSS}$	$V_{GS}=0V, I_D=250\mu A$	100	-	-	V
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{DS}=100V, V_{GS}=0V$	-	-	1	$\mu A$
		$V_{DS}=100V, V_{GS}=0V, T_J=150$	-	-	100	
Gate-Body Leakage Current	I					



# YJR60G10A

## Typical Electrical and Thermal Characteristics Diagrams

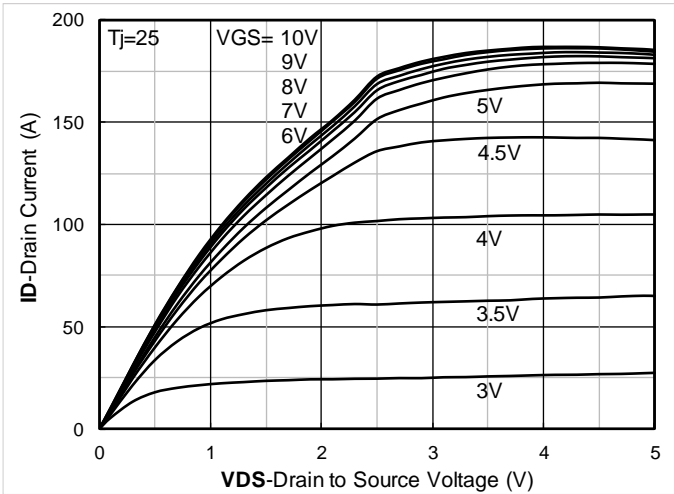


Figure 1. Output Characteristics

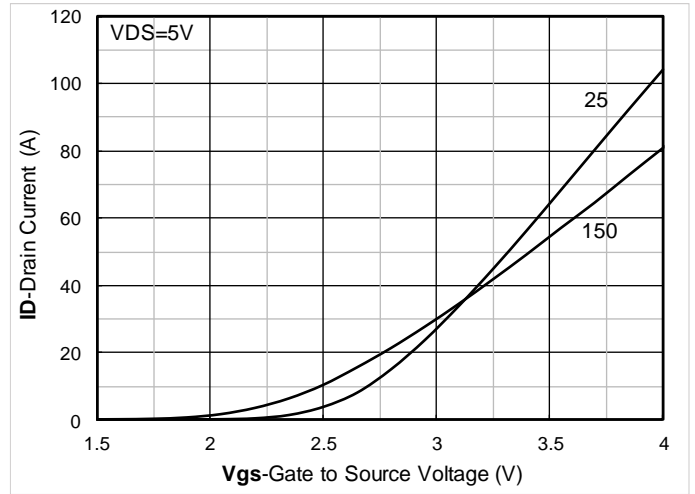


Figure 2. Transfer Characteristics

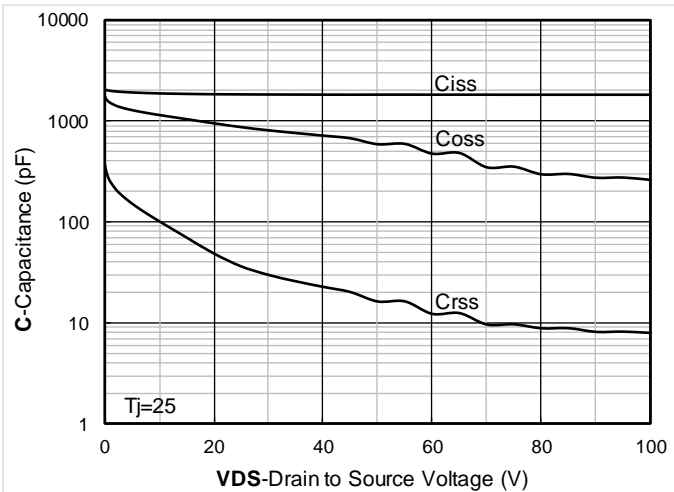


Figure 3. Capacitance Characteristics

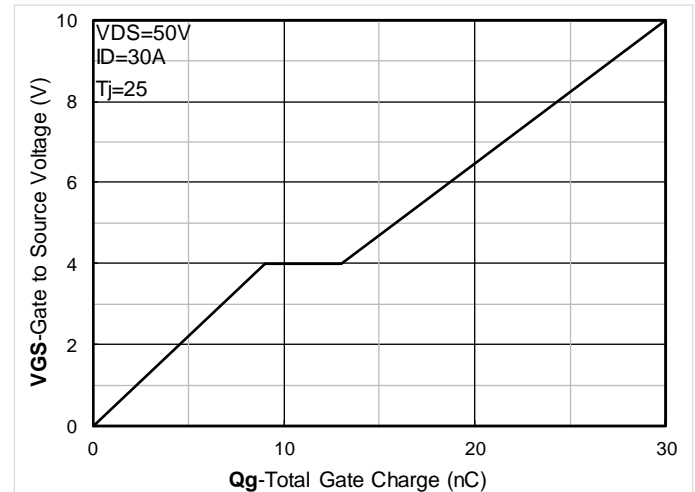


Figure 4. Gate Charge

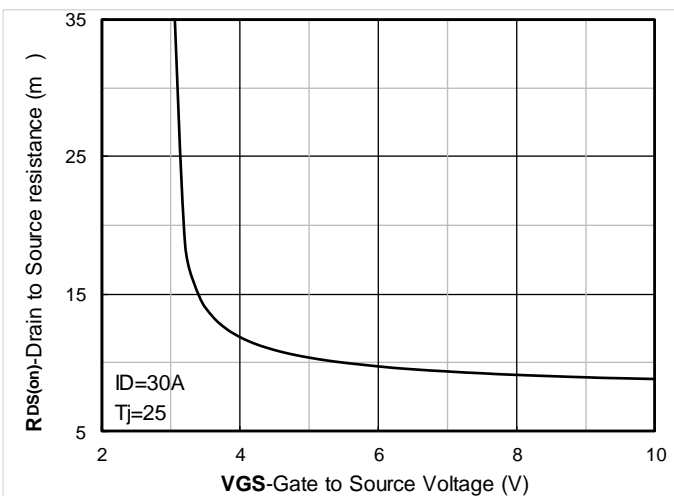


Figure 5. On-Resistance vs Gate to Source Voltage

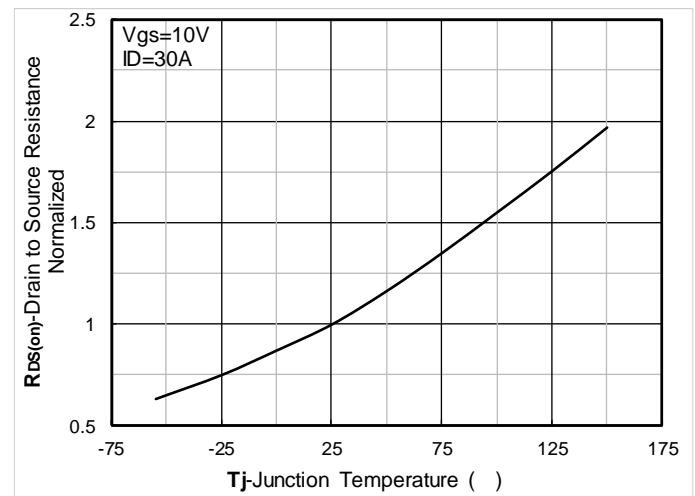


Figure 6. Normalized On-Resistance



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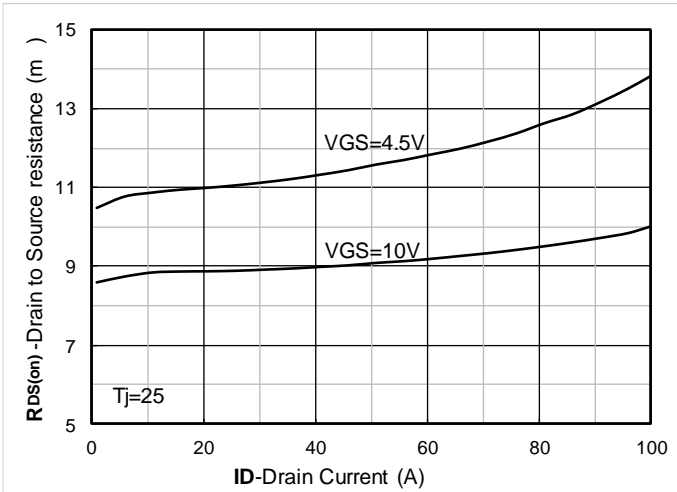


Figure 7. RDS(on) VS Drain Current

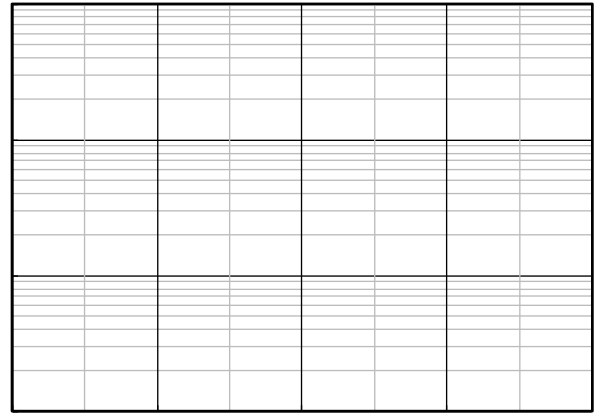


Figure 8. Forward characteristics of reverse diode

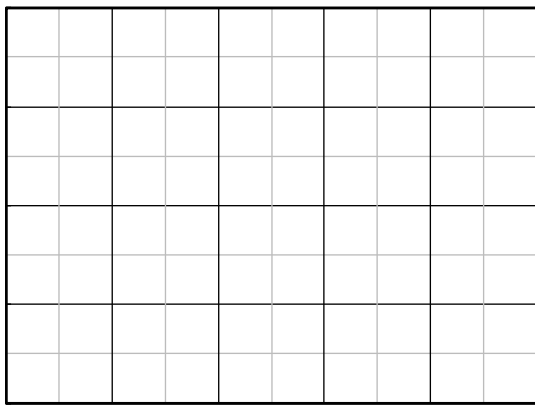


Figure 9. Normalized breakdown voltage

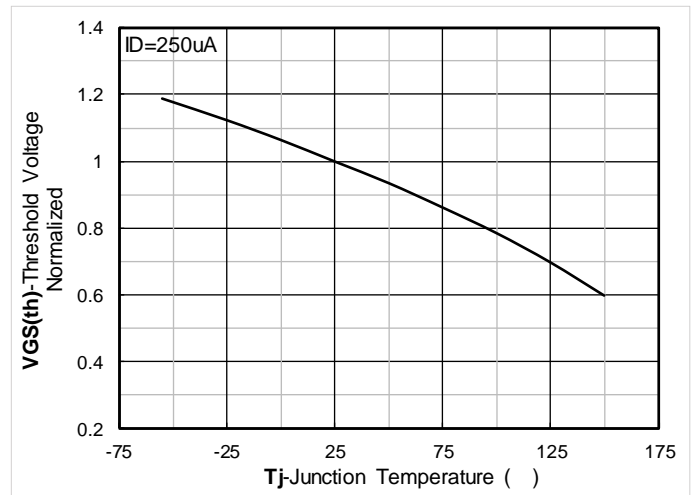


Figure 10. Normalized Threshold voltage

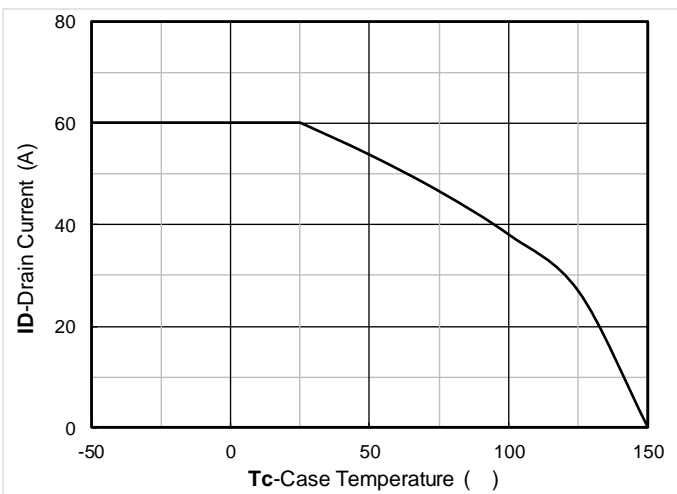
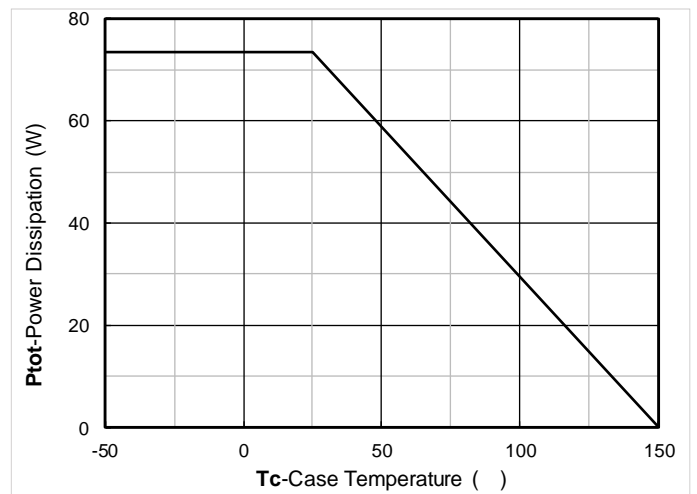


Figure 11. Current dissipation



e

e

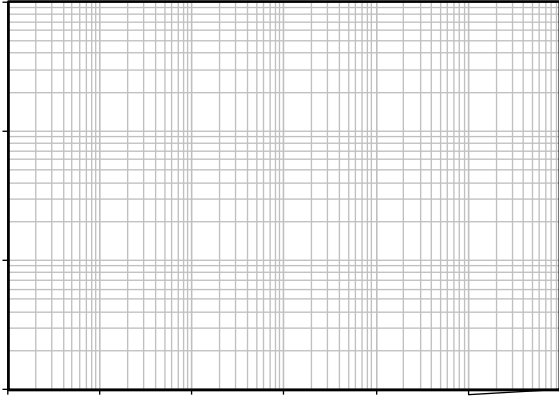


Figure 13. Maximum Transient Thermal Impedance

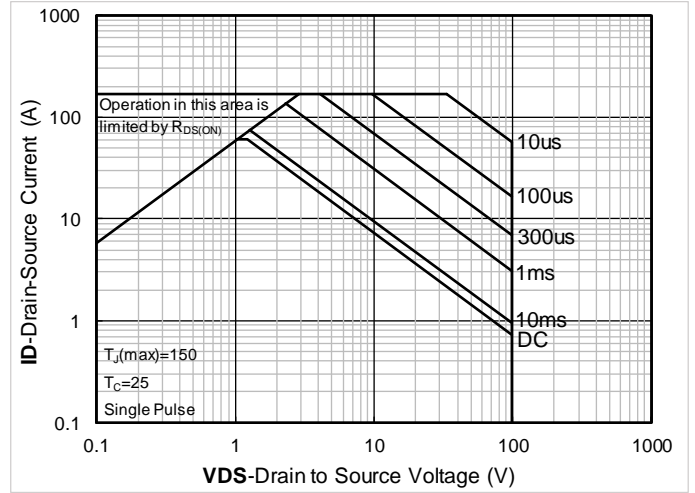


Figure 14. Safe Operation Area

## Test Circuits & Waveforms

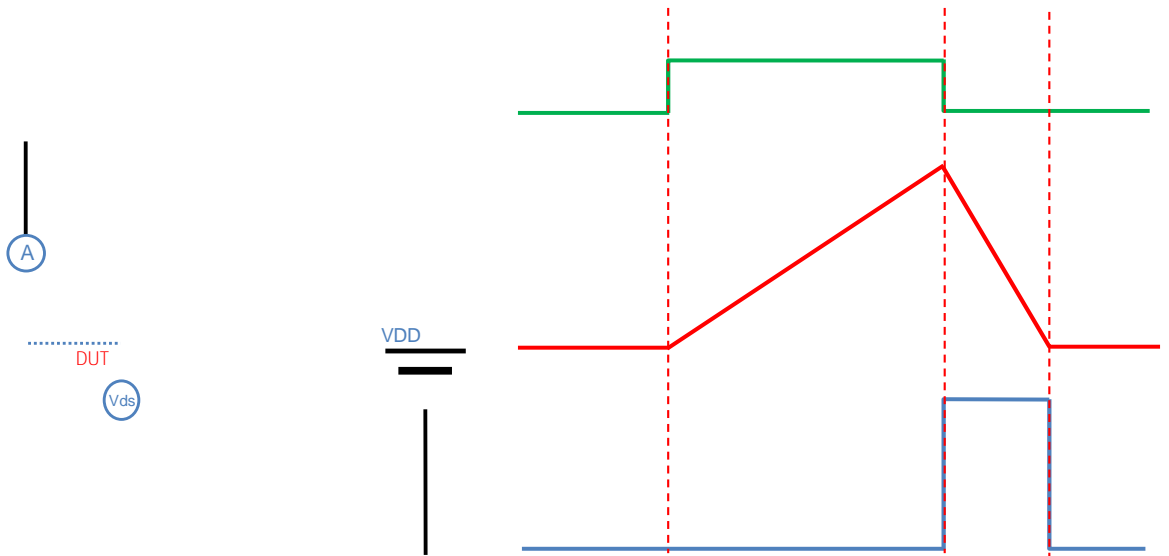


Figure A. Unclamped Inductive Switching (UIS) Test Circuit & Waveform



Figure B. Gate Charge Test Circuit & Waveform

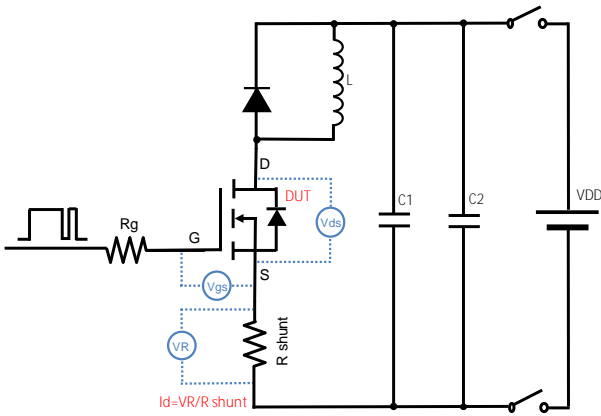


Figure C. Resistive Switching Test Circuit & Waveform

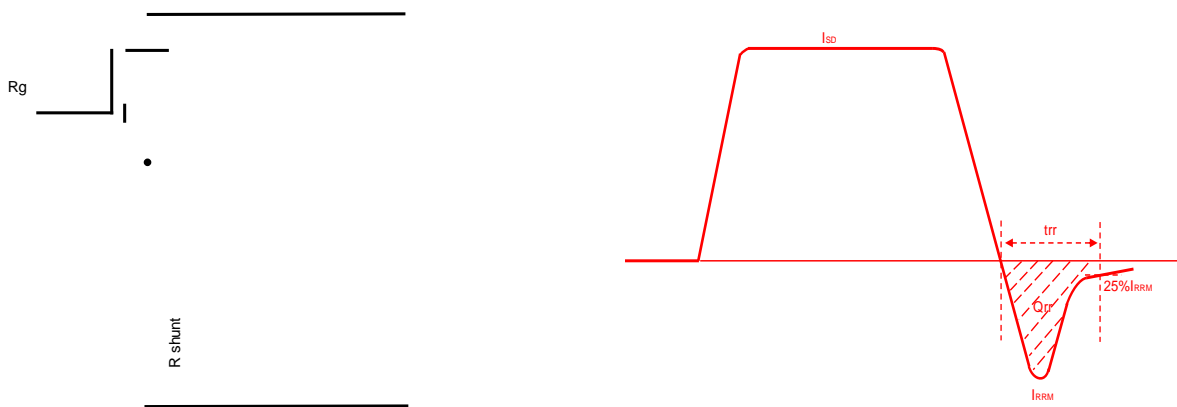


Figure D. Diode Recovery Test Circuit & Waveform



TO-251S Package information





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