



N-Channel Enhancement Mode Field Effect Transistor

Product Summary

V_{DS}	60V
I_D	200A
$R_{DS(ON)}$ (at $V_{GS}=10V$)	2.9 mohm
$R_{DS(ON)}$ (at $V_{GS}=4.5V$)	3.9 mohm
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 $R_{DS(ON)}$

-0 Flammability Rating

alogen Free

Applications

Isolated DC-DC Converters
Motor control
Invertors

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

Parameter		Symbol	Limit	Unit
Drain-source Voltage		V_{DS}	60	V
Gate-source Voltage		V_{GS}	± 20	V
Drain Current ^A	$T_C=25$	I_D	200	A
	$T_C=100$		125	
Pulsed Drain Current ^B		I_{DM}	600	A
Avalanche energy ^C		EAS	506	mJ
Total Power Dissipation ^D		P_D	260	W
Thermal Resistance Junction-to-Case		R_{JC}	0.48	/ W
Thermal Resistance Junction-to-Ambient ^E		R_{JA}	28	
Junction and Storage Temperature Range		T_J, T_{STG}	-55 +150	

Ordering Information (Example)

PREFERRED P/N	PACKING CODE	Marking	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
YJB200G06C	F2	YJB200G06C				



Typical Performance Characteristics

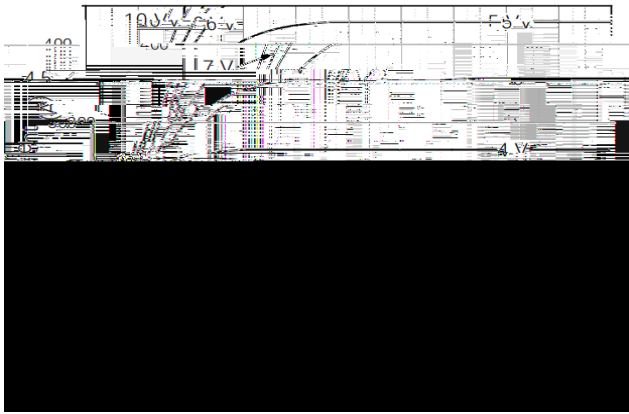


Figure1. Output Characteristics



Figure2. Transfer Characteristics

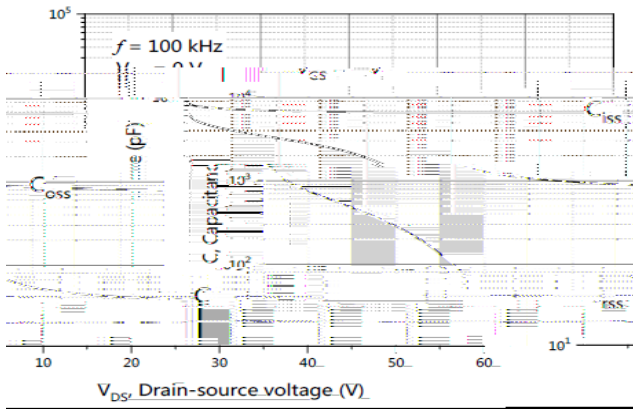


Figure3. Capacitance Characteristics

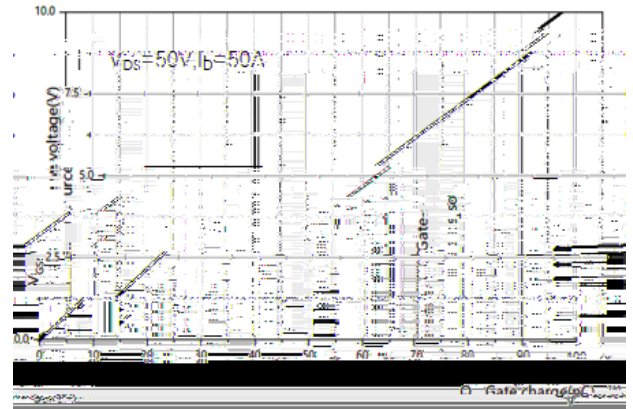


Figure4. Gate Charge

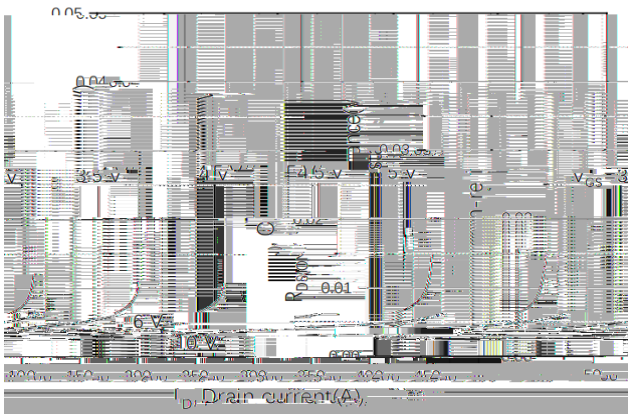


Figure5. Drain-Source on Resistance

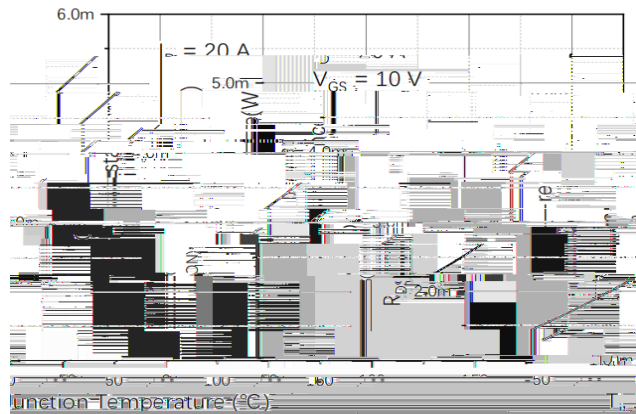


Figure6. Drain-Source on Resistance

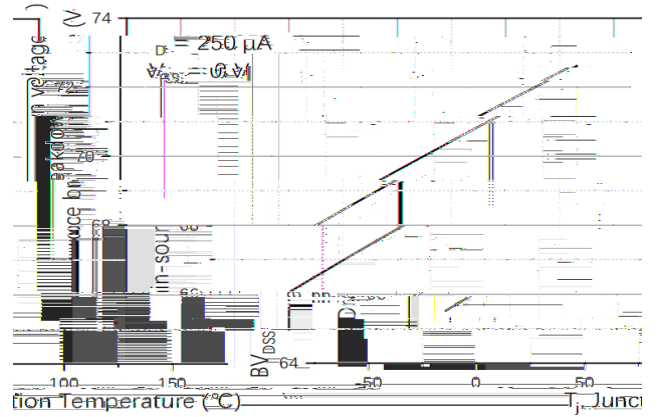


Figure8. Drain-source breakdown voltage

Figure7. Safe Operation Area

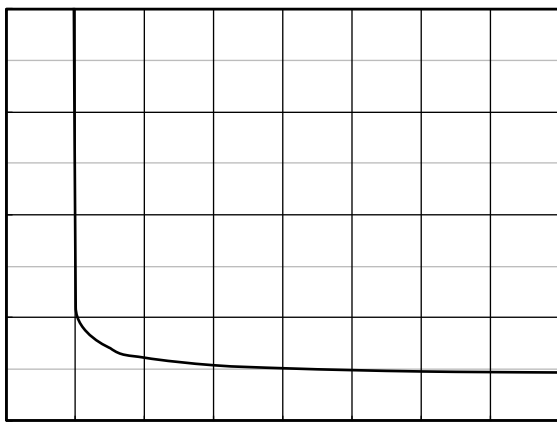


Figure9. On-Resistance vs Gate to Source Voltage

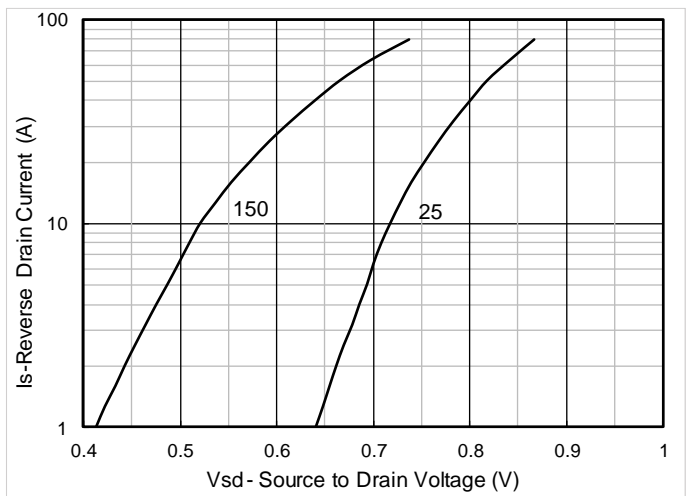


Figure10. Forward characteristics of reverse diode

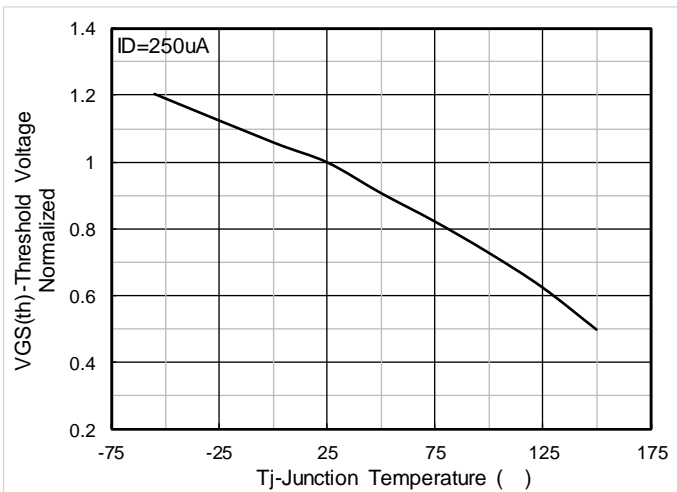


Figure11. Normalized Threshold voltage

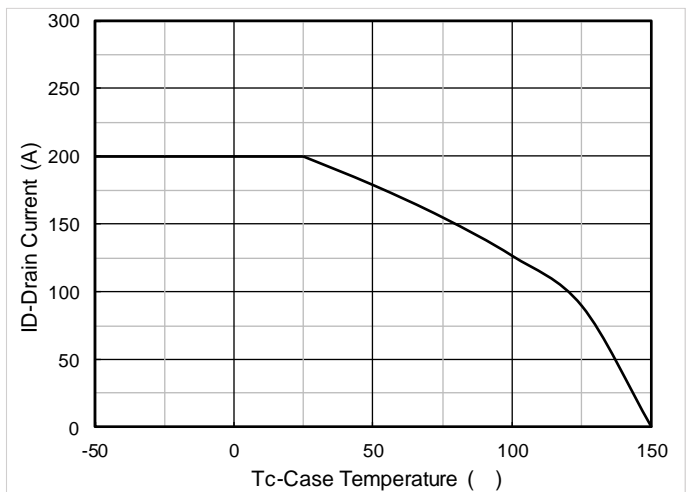


Figure12. Current dissipation



TO-263-HY Package information

SYML	MIN.
A2	
b2	0.050
c	
c2	
D2	
E	
E1	



Disclaimer

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