



N-Channel Enhancement Mode Field Effect Transistor

Product Summary

V_{DS}	60V
I_D (Silicon limited)	150A
$R_{DS(ON)}$ (at $V_{GS}=10V$)	3.5 mohm
$R_{DS(ON)}$ (at $V_{GS}=4.5V$)	5.0 mohm
100% EAS Tested	
100% V_{DS} Tested	
ESD Protected up to 2.0KV(HBM)	

General Description

Split Gate Trench MOSFET technology
Excellent package for heat dissipation
High density cell design for



YJB150G06AK

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

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Static Parameter						
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V, I_D=250\mu A$	60			V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=60, V_{GS}=0V$			1	μA
		$V_{DS}=60, V_{GS}=0V, T_j=150$			100	
Gate-Body Leakage Current	I_{GSS}	$V_{GS}=20V, V_{DS}=0V$			10	μA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=250\mu A$	1.0	1.7	2.5	V
Static Drain-Source On-Resistance	$R_{DS(on)}$	$V_{GS}=10V, I_D=20A$		2.7	3.5	m
		$V_{GS}=4.5V, I_D=20A$		3.5	4.8	m
Diode Forward Voltage	V_{SD}	$I_S=20A, V_{GS}=0V$		0.8	1.3	V
Maximum Body-Diode Continuous Current	I_S					



Typical Performance Characteristics

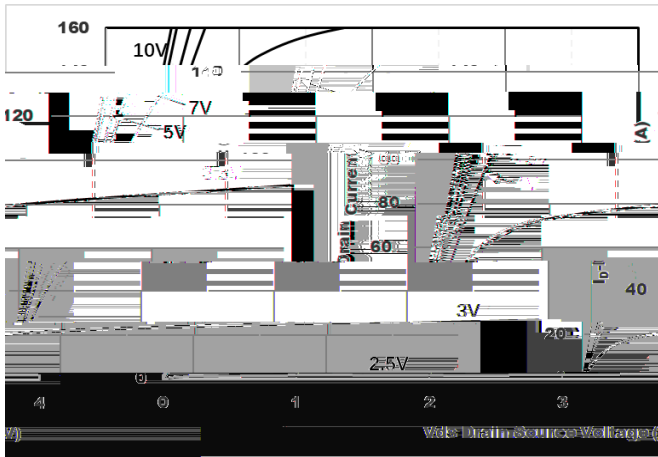


Figure1. Output Characteristics

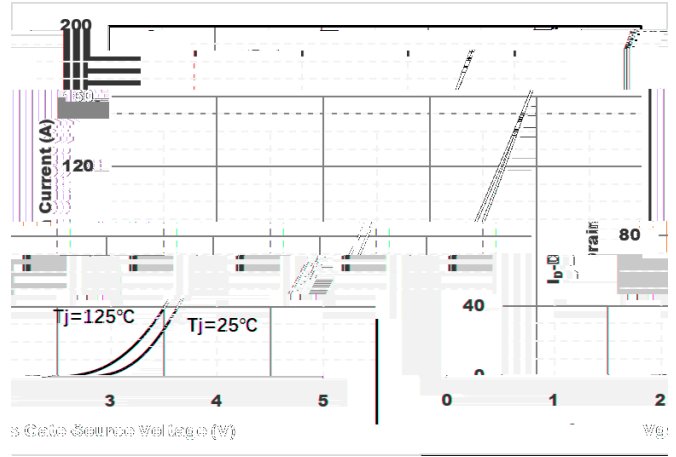


Figure2. Transfer Characteristics

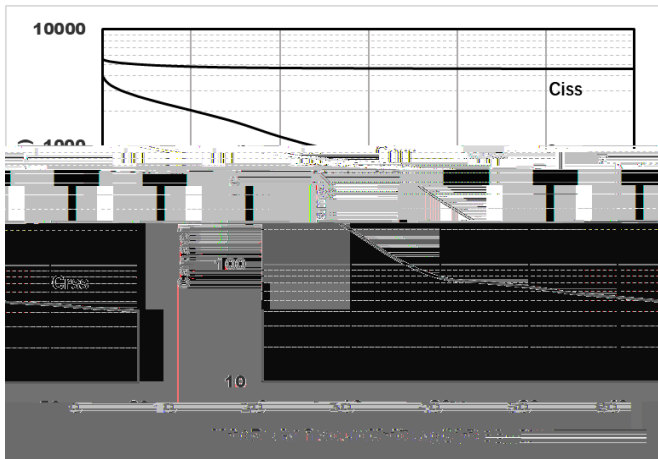


Figure3. Capacitance Characteristics

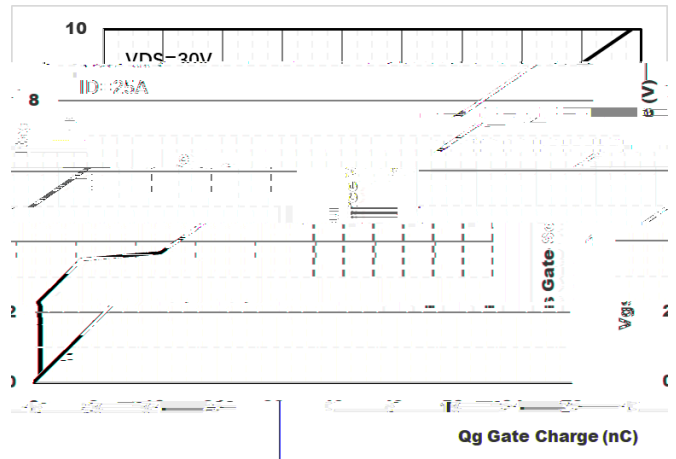


Figure4. Gate Charge

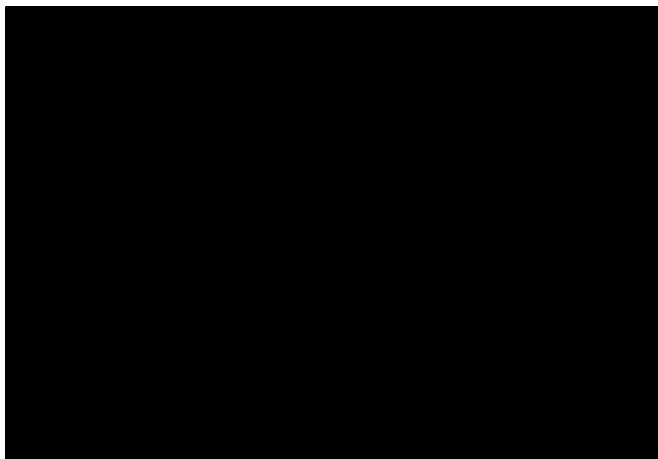


Figure5. On-Resistance vs. Drain Current and Gate Voltage

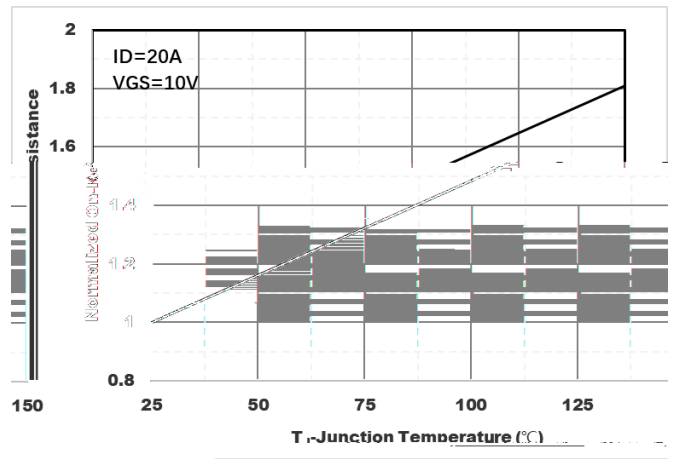


Figure6. Normalized On-Resistance





Figure13. Normalized Maximum Transient thermal impedance

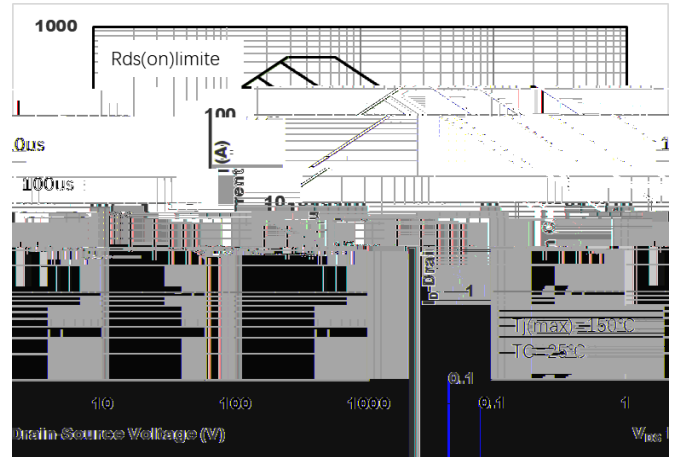


Figure14. Safe Operation Area



TO-263-HY Package information

SYM.	MIN.	
A2		
b2	0.050	
c		
c2		
D2		
E		
E1		

