



N-Channel Enhancement Mode Field Effect Transistor

Product Summary

- V_{DS} 30 V
- I_D 200mA
- $R_{DS(ON)}$ (at $V_{GS}=10V$) 2.5 Ω
- $R_{DS(ON)}$ (at $V_{GS}=4.5V$) 3 Ω
- Gate-Source ESD Rating Up to 2KV (HBM)

General Description

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2SK3018KWJ

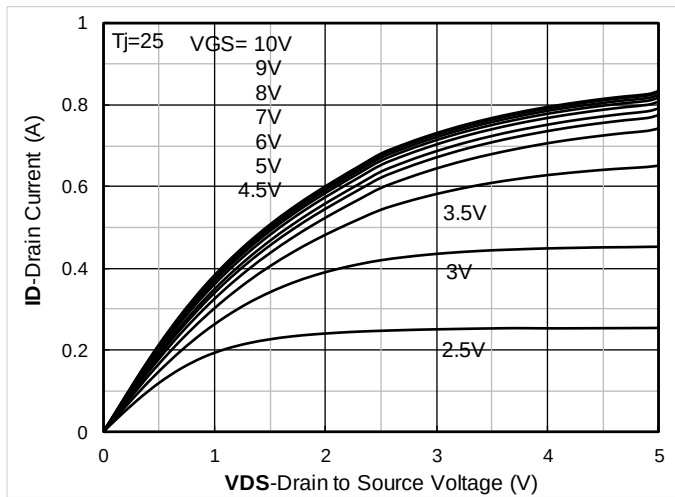
■ Electrical Characteristics (T_J=25 unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Static Parameter						

Drain-Source Breakdown Voltage	BV _{DSS}	V _{GS} = 0V, I _D =				
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■ Typical Electrical and Thermal Characteristics Diagrams



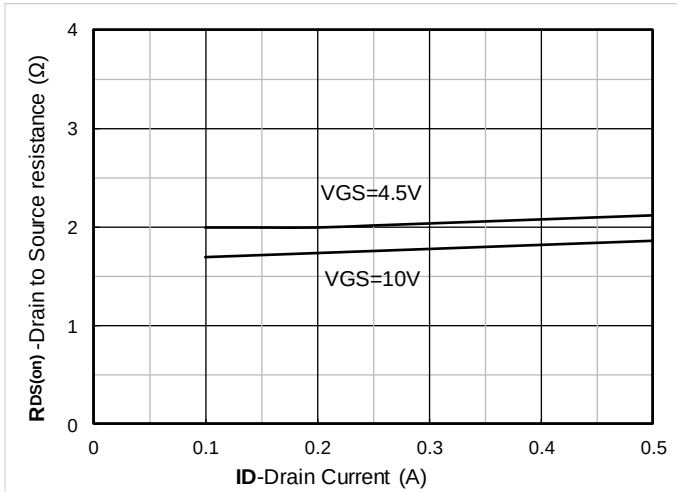


Figure 7. $R_{DS(on)}$ VS Drain Current

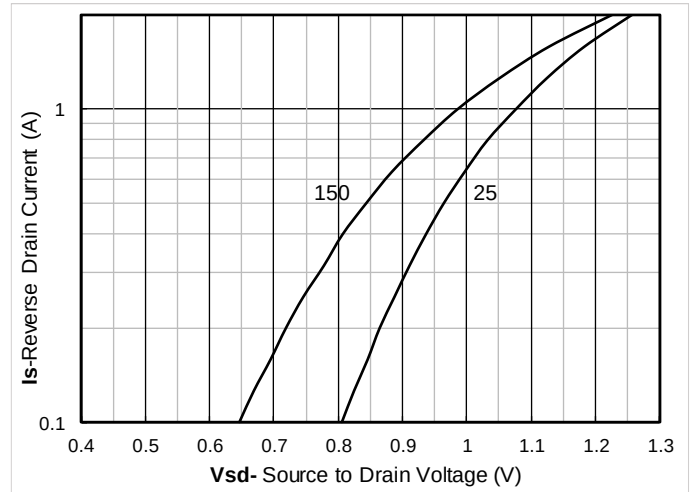


Figure 8. Forward characteristics of reverse diode

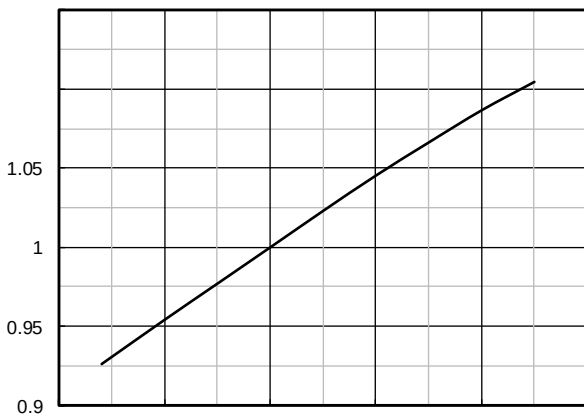


Figure 9. Normalized breakdown voltage

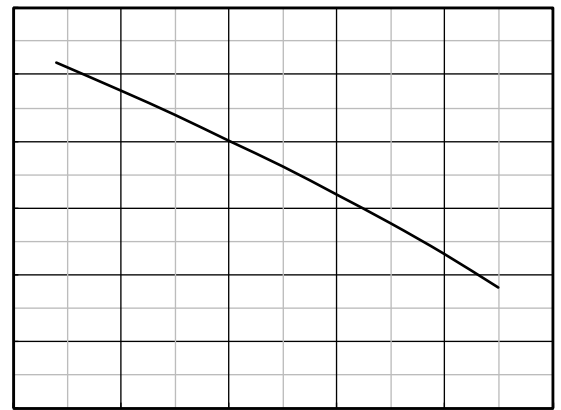


Figure 10. Normalized Threshold voltage

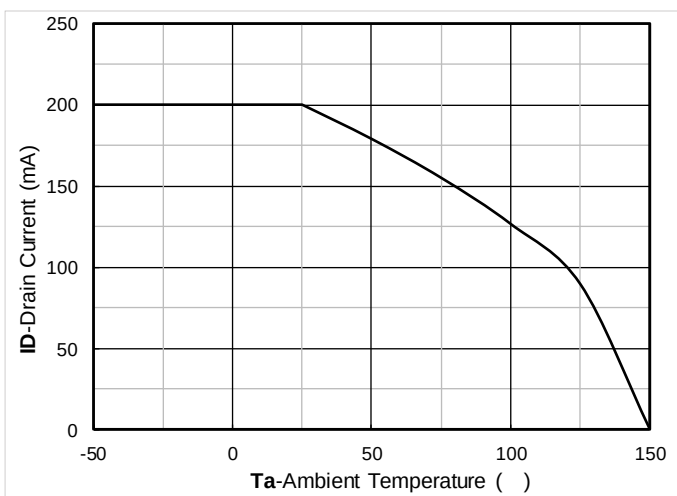


Figure 11. Current dissipation

Figure 12. Power dissipation



Figure 13. Maximum Transient Thermal Impedance

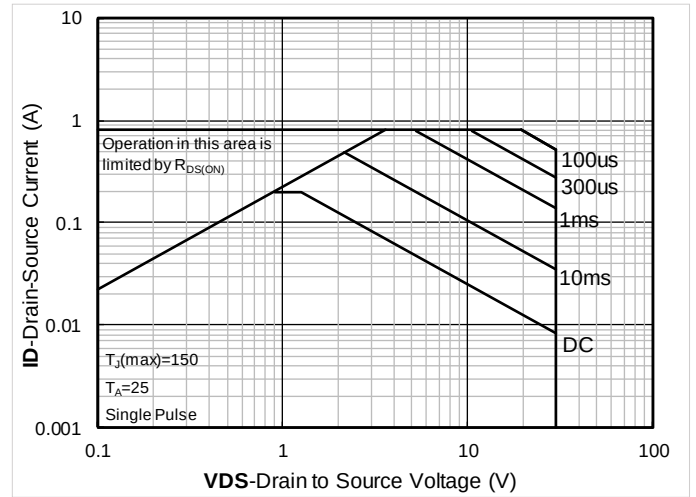


Figure 14. Safe Operation Area

■ Test Circuits & Waveforms

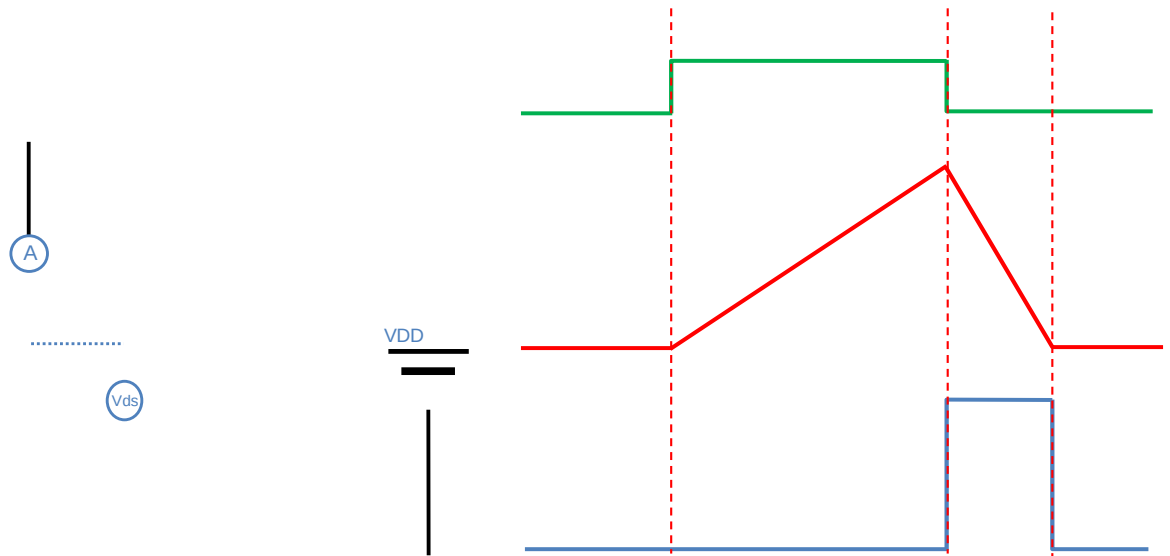


Figure A. Unclamped Inductive Switching (UIS) Test Circuit & Waveform

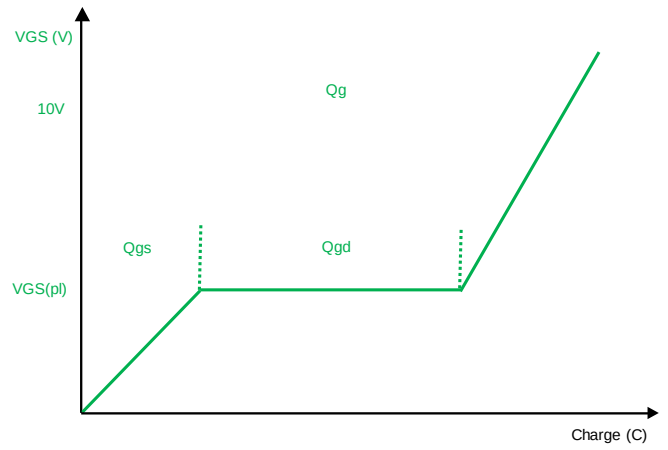
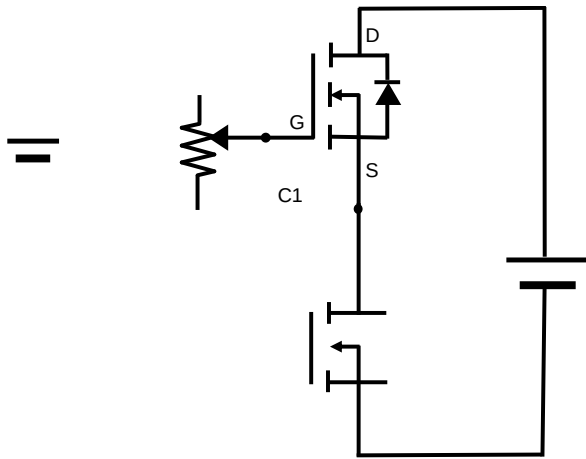


Figure B. Gate Charge Test Circuit & Waveform

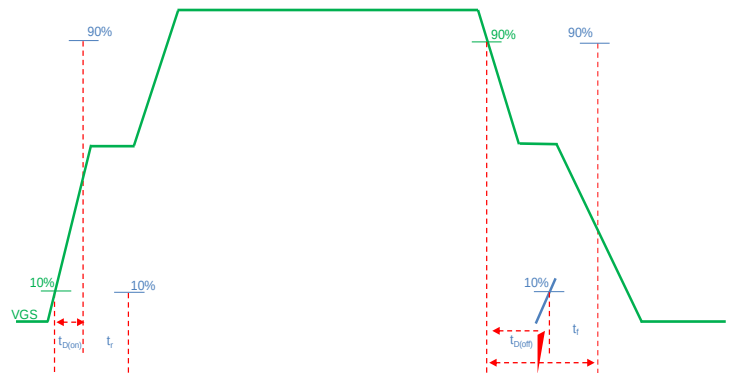
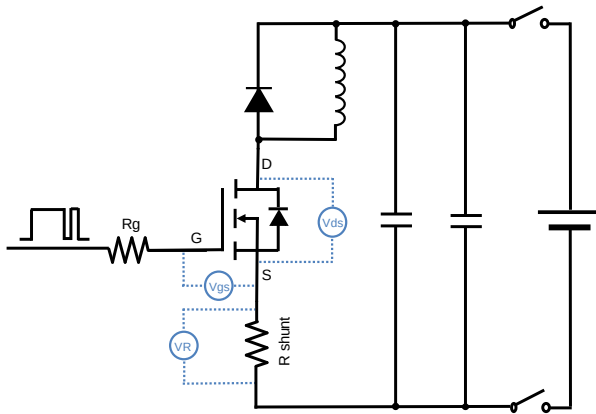


Figure C.



■ SOT-323 Package information

DIMENSIONS		
SYMBOL	INCHES	
	MIN.	
A	0.035	
A1	0.000	
A2	0.035	
b	0.006	
c	0.004	
D		
E		
E1		

