Main Product Characteristics:

Features and Benefits

Description:

Absolute Max Rating:

Symbol	Parameter	Max.	Units
I_D @ T_C = 25°C	Continuous Drain Current, V_{GS} @ 10V	-3.5	A
I_{DM}	Pulsed Drain Current	-14	

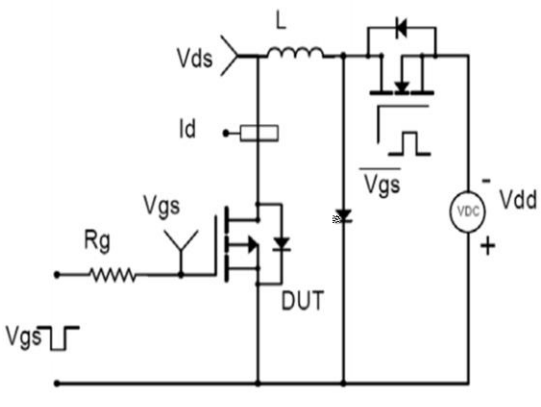
P_D @T_C = 25°C

Thermal Resistance

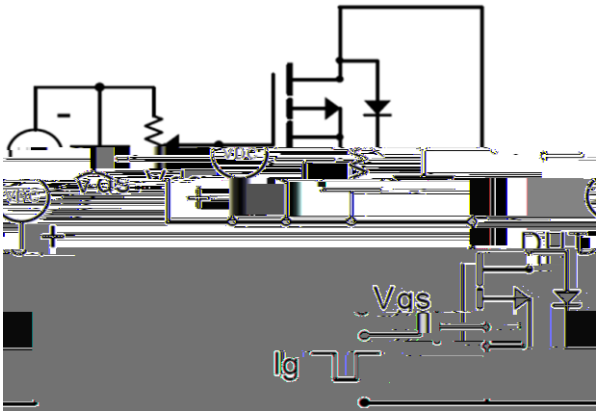
Symbol	Characterizes	Typ.	M(p	n5E(

Test Circuits and Waveforms

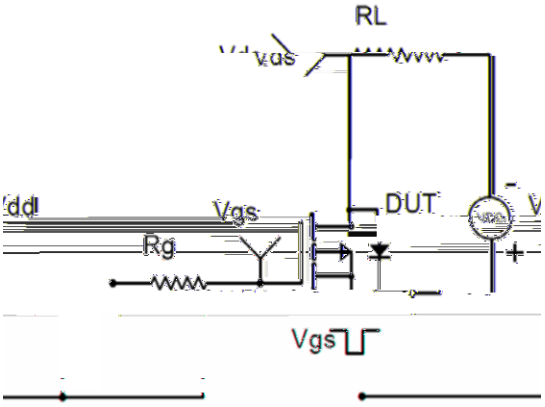
EAS Test Circuit:



Gate Charge Test Circuit:



Switching Time Test Circuit:



Switching Waveforms:

Notes:

Calculated continuous current based on maximum allowable junction temperature.

Repetitive rating; pulse width limited by max. junction temperature.

The power dissipation P_D is based on max. junction temperature, using junction-to-case thermal resistance.

The value of $R_{\theta A}$ is measured with the device mounted on 1 in 2 FR-4 board with 2oz. Copper, in a still air environment with T_A =25°C

Typical Electrical and Thermal Characteristics

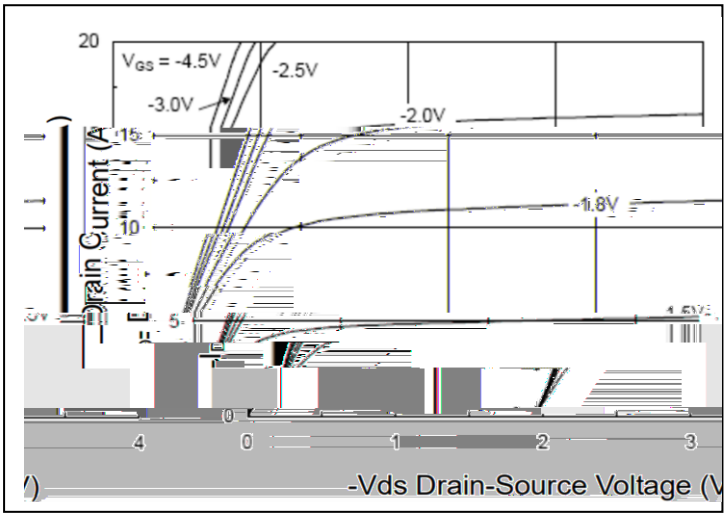


Figure1.Typical Output Characteristics

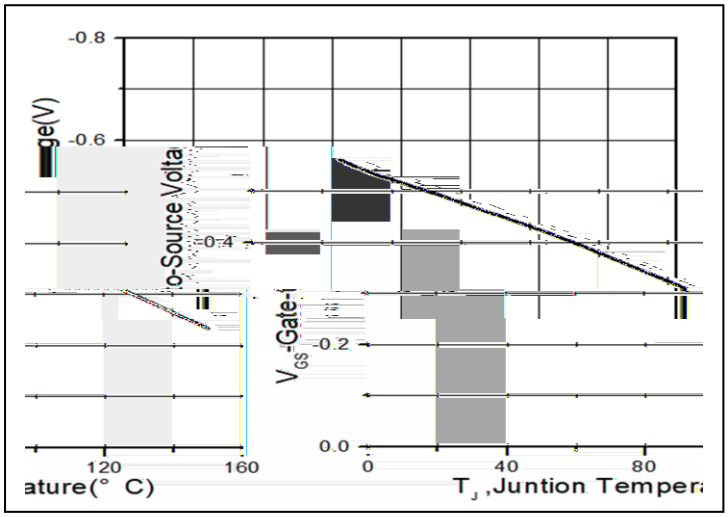


Figure2. Vth vs Junction Temperature

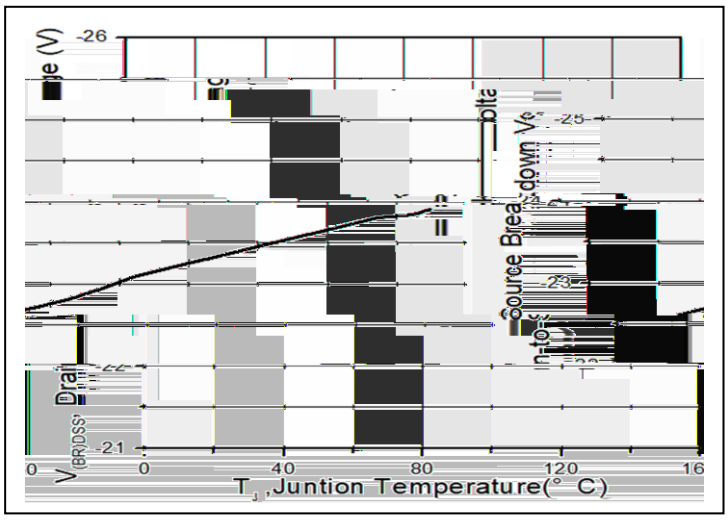


Figure3. Drain-to-Source Breakdown Voltage vs. Junction Temperature

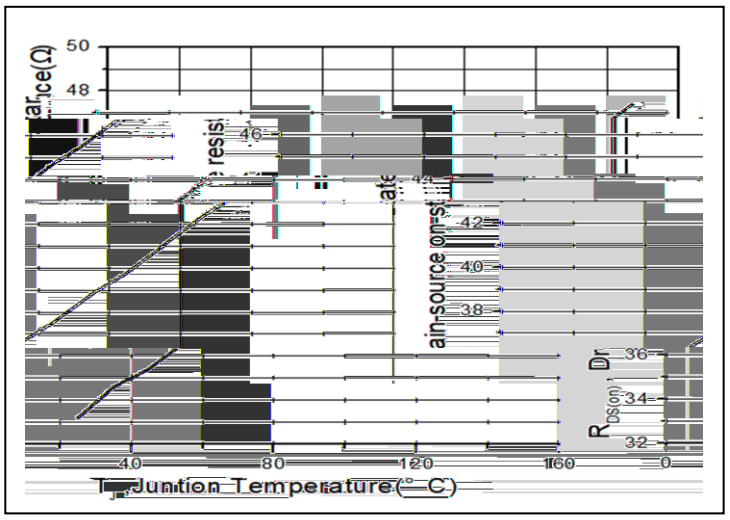


Figure4. $R_{DS(on)}$ vs. Junction Temperature

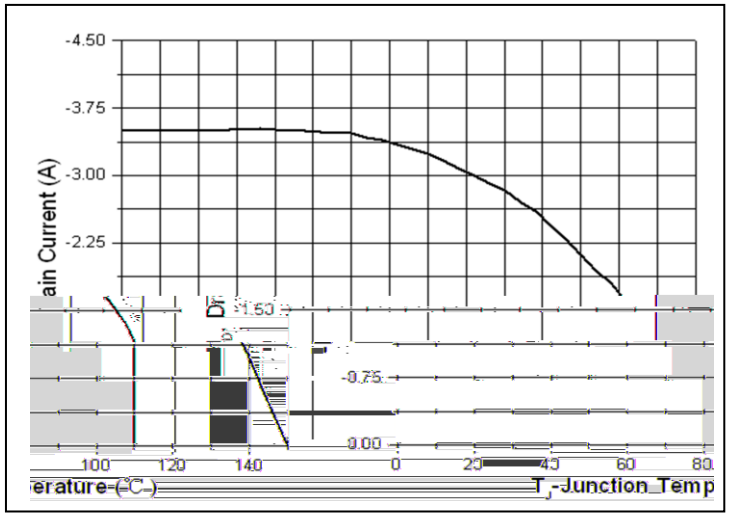


Figure5. Drain Current vs. Junction Temperature

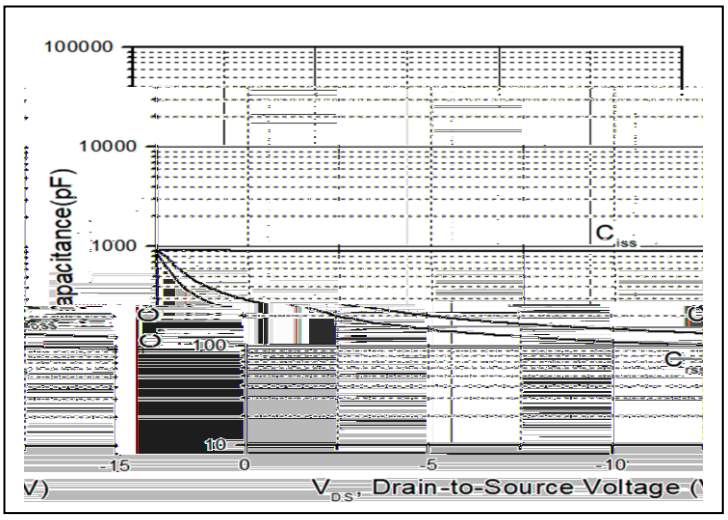


Figure6. Capacitance

Typical Electrical and Thermal Characteristics

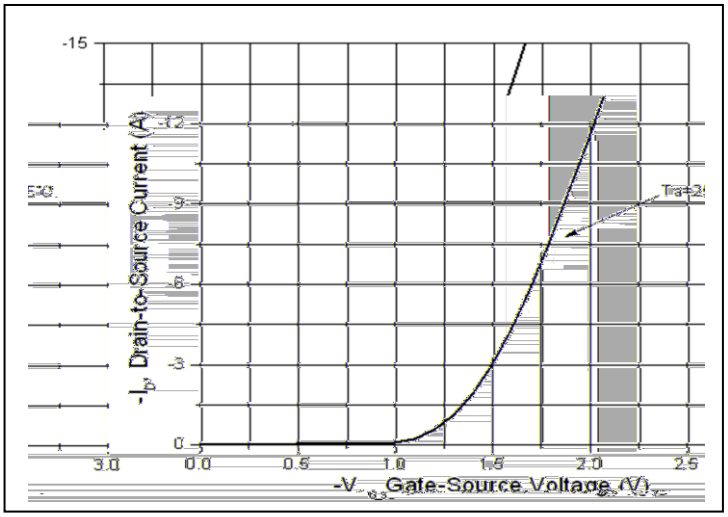


Figure7. Transfer Characteristics

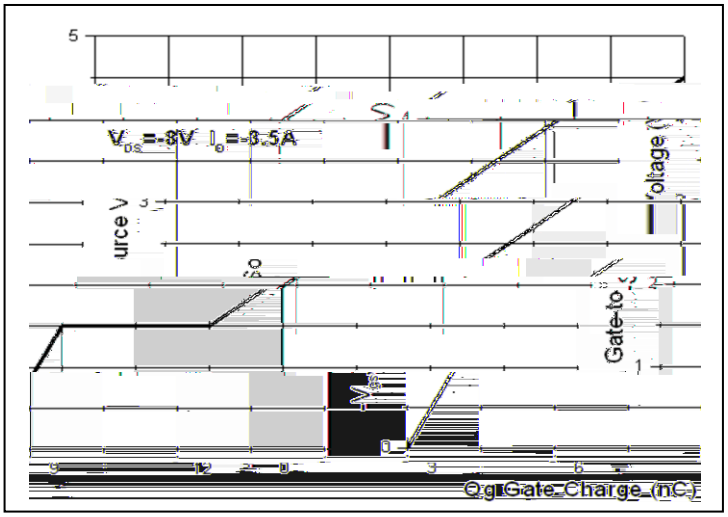


Figure8. Gate source voltage vs. Gate Charge

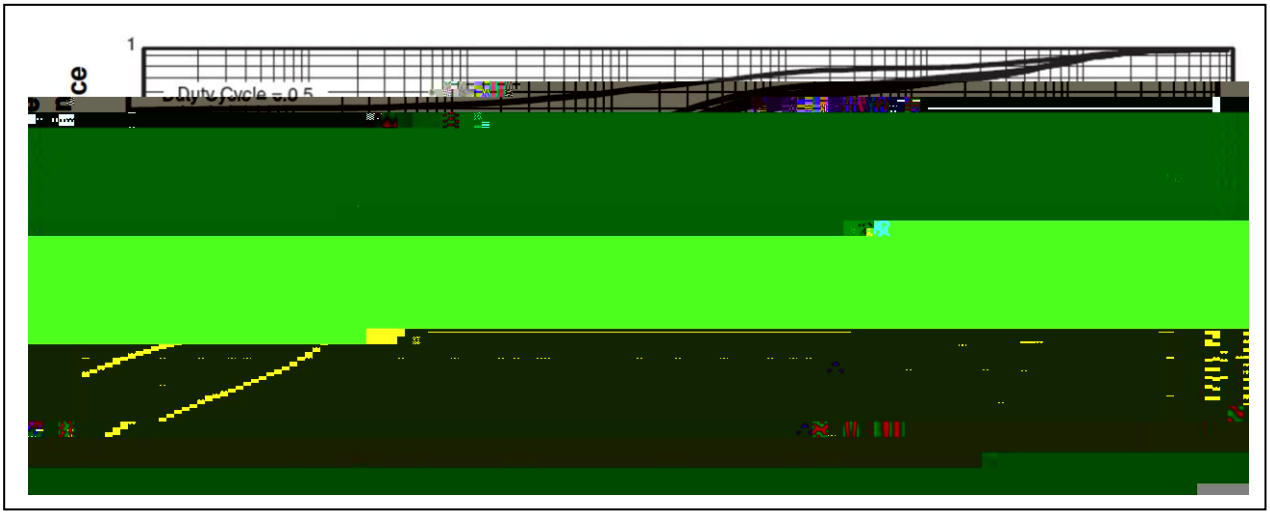
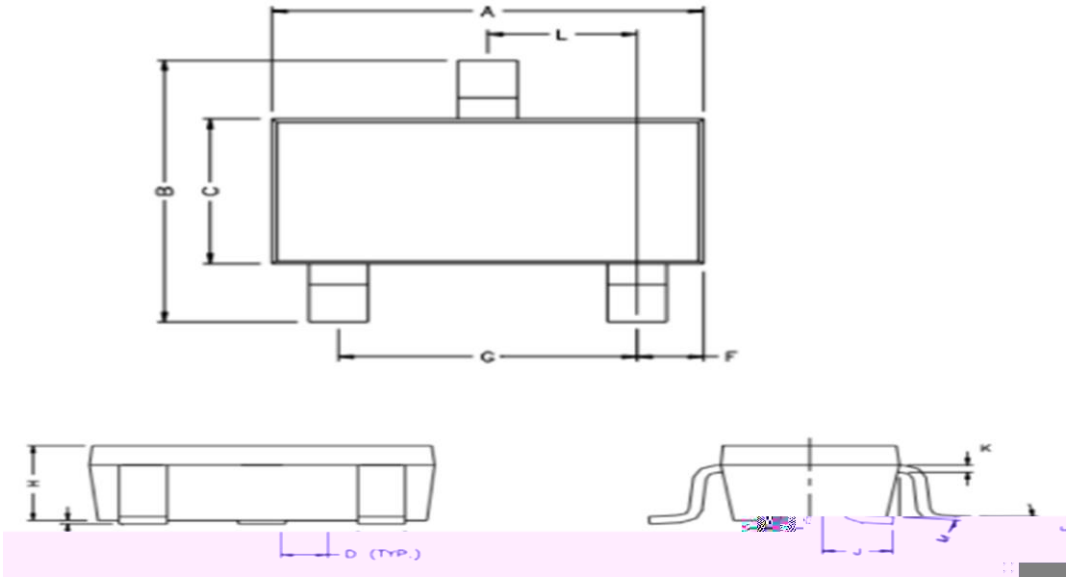


Figure9. Normalized Maximum Transient Thermal Impedance

Mechanical Data

SOT-23 Package Outline(Unit:mm)



REF.	Millimeter Min.	Max.	REF.	Millimete Min.	Max.
A	2.80	3.00	G	1.80	2.00

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