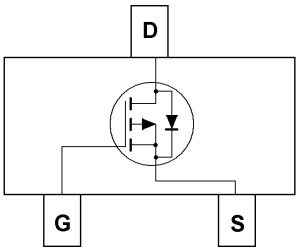
SK3407

P-Channel Enhancement Mode MOSFET

Feature

- -30V/-4.1A, $R_{DS(ON)}$ =80mΩ(MAX) @V_{GS} = -10V.
  $R_{DS(ON)}$ = 100mΩ(MAX) @V_{GS} = -4.5V.
  .
- Super High dense cell design for extremely low $R_{DS(ON)}$
- Reliable and Rugged
- SC-59 for Surface Mount Package



SC-59

Applications

- Power Management
- Portable Equipment and Battery Powered Systems.

Absolute Maximum Ratings T_A=25℃Unless Otherwise noted

Parameter	Symbol	Limit	Units
Drain-Source Voltage	V_{DS}	-30	V
Gate-Source Voltage	V_{GS}	±20	V
Drain Current-Continuous	I_D	-4.1	A

Electrical Characteristics T_A=25℃Unless Otherwise noted

Parameter	Symbol	Test Conditions	Min	Typ.	Max	Units
Off Characteristics						
Drain to Source Breakdown Voltage	BVDSS	VGS=0V, ID=-250μA	-30	-	-	V
Zero-Gate Voltage Drain Current	IDSS	VDS=-30V, VGS=0V	-	-	-1	μA
Gate Body Leakage Current, Forward	IGSSF	VGS=20V, VDS=0V	-	-	100	nA
Gate Body Leakage Current, Reverse	IGSSR	VGS=-20V, VDS=0V	-	-	-100	nA
On Characteristics						
Gate Threshold Voltage	VGS(th)	VGS= VDS, ID=-250μA	-1.0	-	-3.0	V
Static Drain-source On-Resistance	RDS(ON)	VGS =-10V, ID =-4.1A	-	65	80	mΩ
		VGS =-4.5V, ID =-4.0A	-	85	100	mΩ
Drain-Source Diode Characteristics and Maximum Ratings						
Drain-Source Diode Forward Voltage	VSD	VGS =0V, IS=-1.0A			-1.2	V

Typical Characteristics

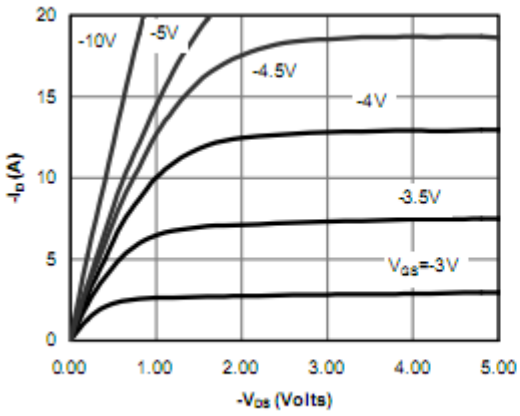


Figure 1: On-Region Characteristics

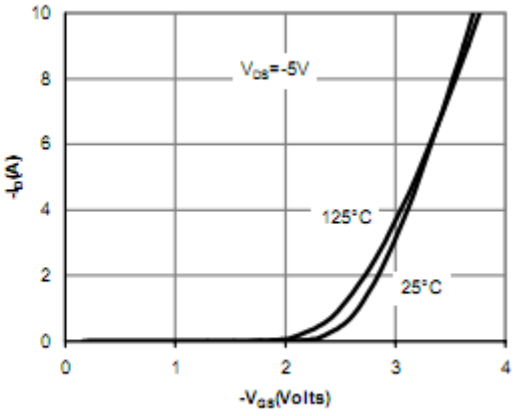


Figure 2: Transfer Characteristics

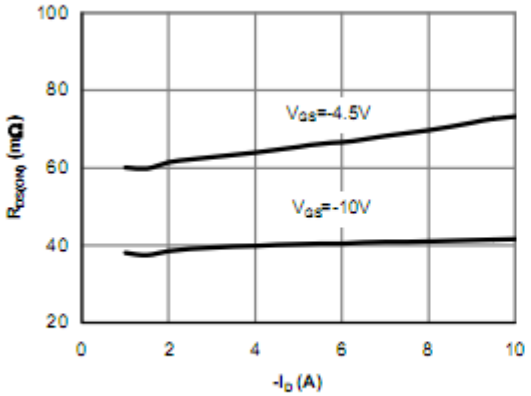


Figure 3: On-Resistance vs. Drain Current and Gate Voltage

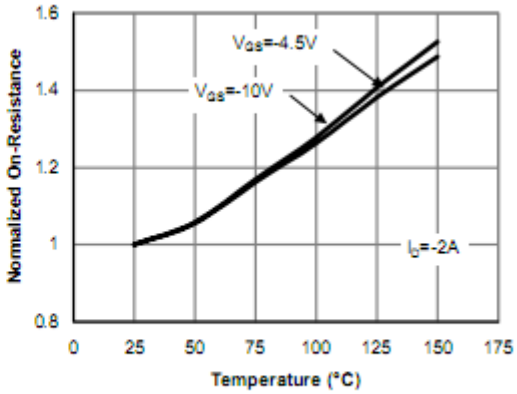


Figure 4: On-Resistance vs. Junction Temperature

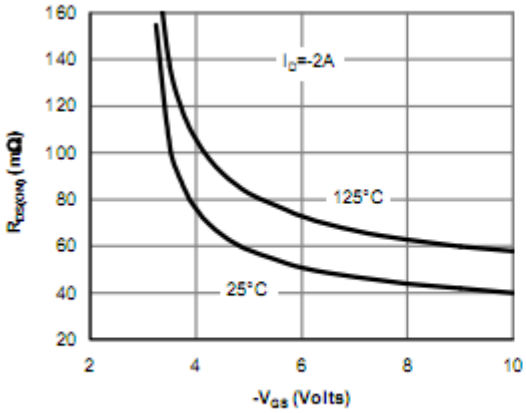


Figure 5: On-Resistance vs. Gate-Source Voltage

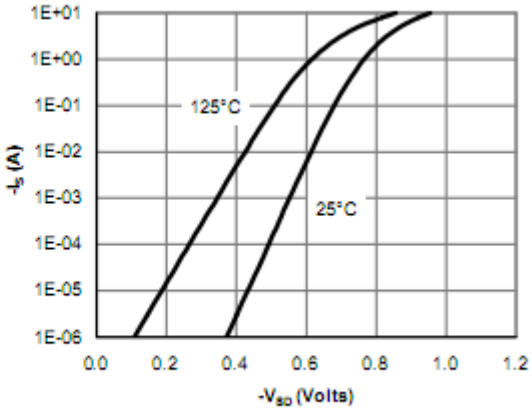


Figure 6: Body-Diode Characteristics

Typical Characteristics

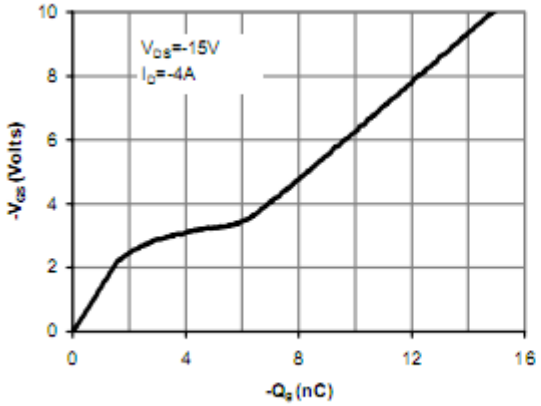


Figure 7: Gate-Charge Characteristics

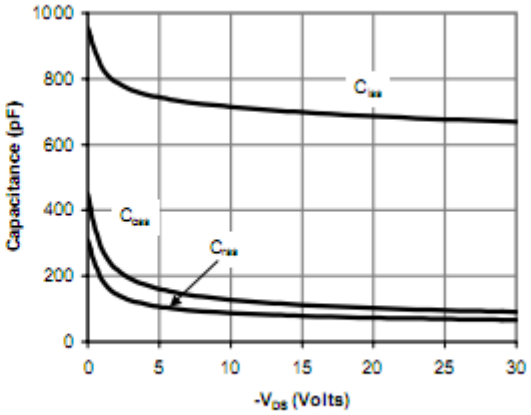


Figure 8: Capacitance Characteristics

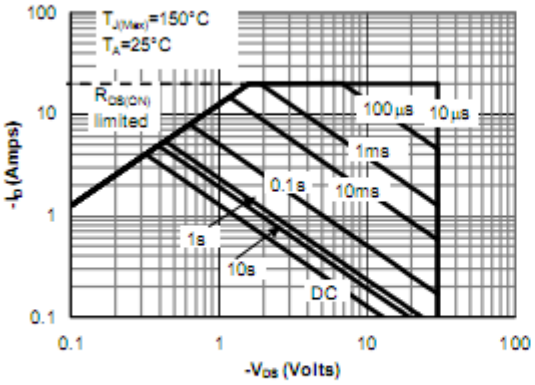


Figure 9: Maximum Forward Biased Safe Operating Area (Note E)

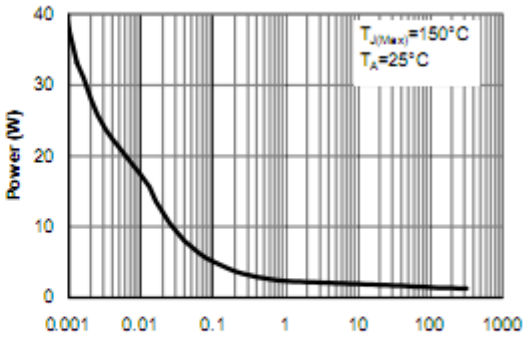


Figure 10: Single Pulse Power Rating Junction-to-Ambient (Note E)

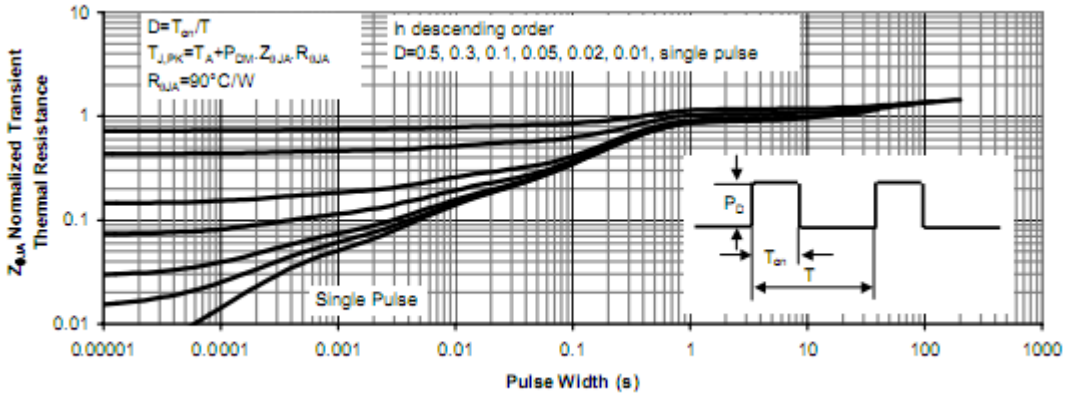


Figure 11: Normalized Maximum Transient Thermal Impedance