



P-Channel Enhancement Mode Field Effect Transistor

Product Summary

V_{DS}	-80 V
I_D	-50 A
$R_{DS(ON)}$ (at $V_{GS}=-10V$)	17 m
$R_{DS(ON)}$ (at $V_{GS}=-6V$)	19 m
$R_{DS(ON)}$ (at $V_{GS}=-4.5V$)	22 m
100% EAS Tested	
100% V_{DS} Tested	

General Description

Split gate trench MOSFET technology
Low $R_{DS(on)}$ & FOM
Excellent stability and uniformity
Moisture Sensitivity Level 1
Epoxy Meets UL 94 V-0 Flammability Rating
Halogen Free

Applications

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Absolute Maximum Ratings



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

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Static Parameter						
Drain-Source Breakdown Voltage	BV_{DSS}	$V_{GS}=0V, I_D=-250 A$	-80	-	-	V
Zero Gate Voltage Drain Current	I_{DSS}	$V_{DS}=-80V, V_{GS}=0V$	-	-	-1	A
		$V_{DS}=-80V, V_{GS}=0V, T_J=150$	-	-	-100	
Gate-Body Leakage Current	I_{GSS}	$V_{GS}=\pm 18V, V_{DS}=0V$	-	-	± 100	nA
Gate Threshold Voltage	$V_{GS(th)}$	$V_{DS}=V_{GS}, I_D=-250 A$	-1.2	-2.1	-3	



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Typical Electrical and Thermal Characteristics Diagrams

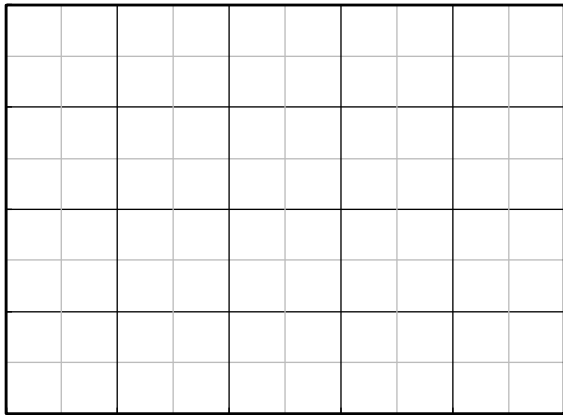


Figure 1. Output Characteristics

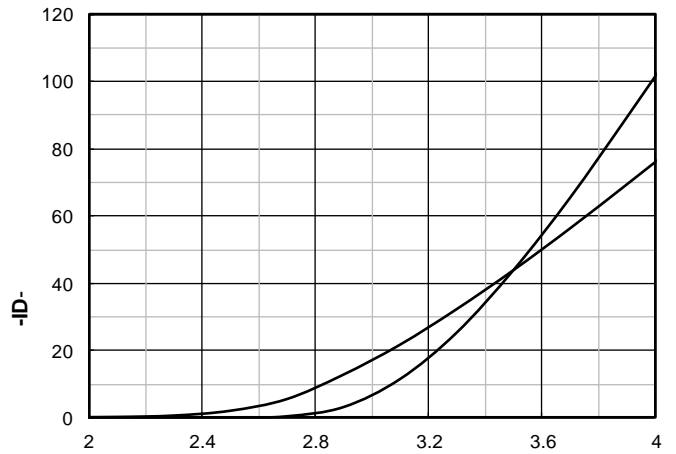


Figure 2. Transfer Characteristics

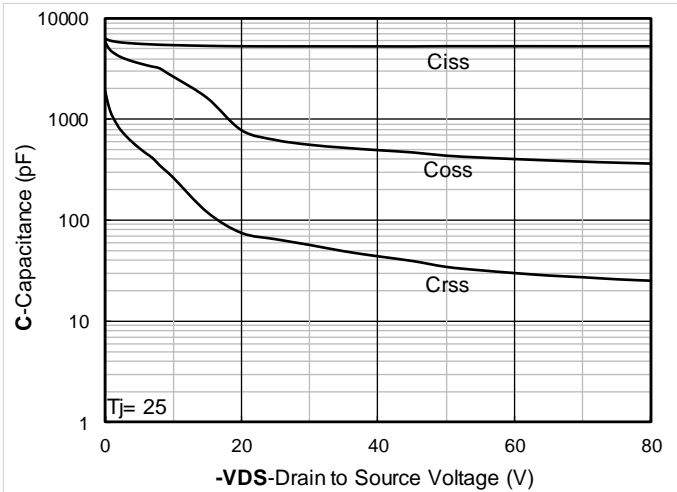


Figure 3. Capacitance Characteristics

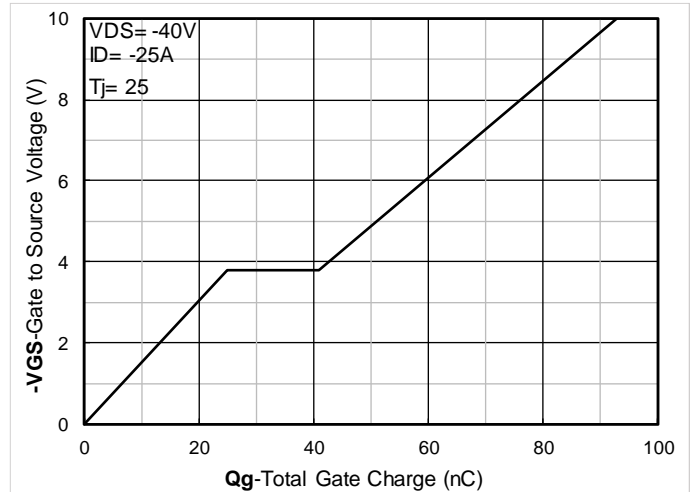


Figure 4. Gate Charge

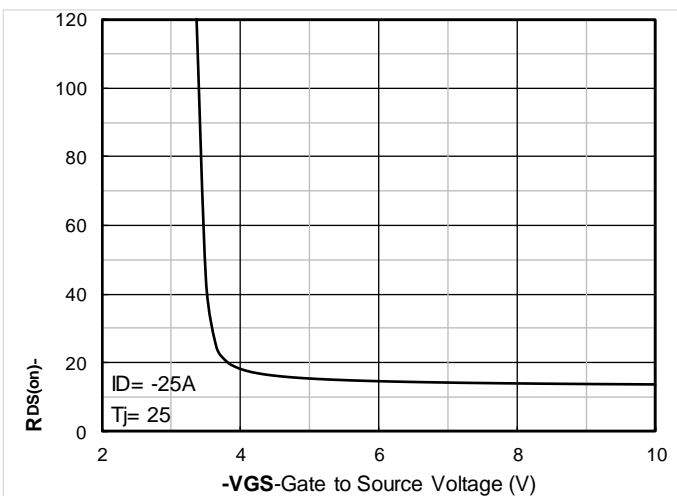


Figure 5. On-Resistance vs Gate to Source Voltage

Figure 6. Normalized On-Resistance



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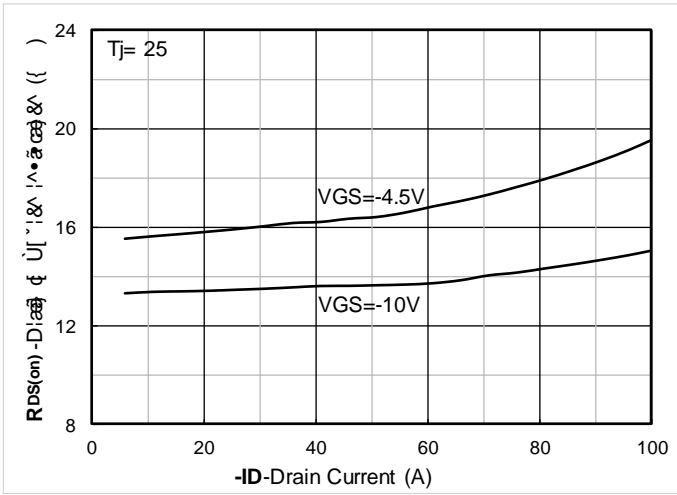


Figure 7. $R_{DS(on)}$ VS Drain Current

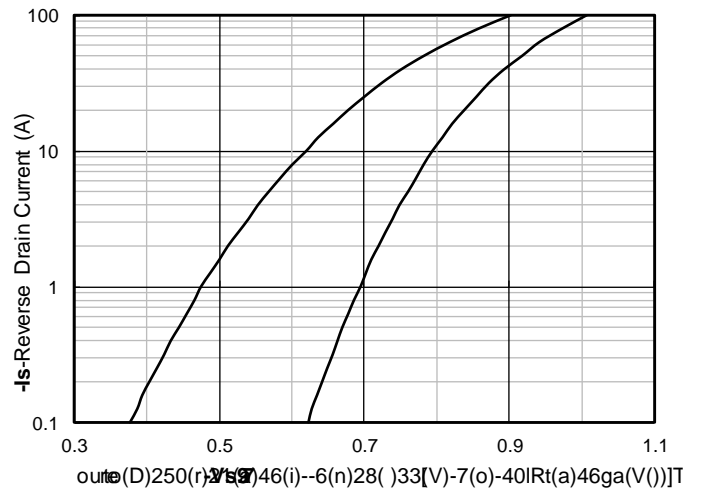


Figure 8. Forward characteristics of reverse diode

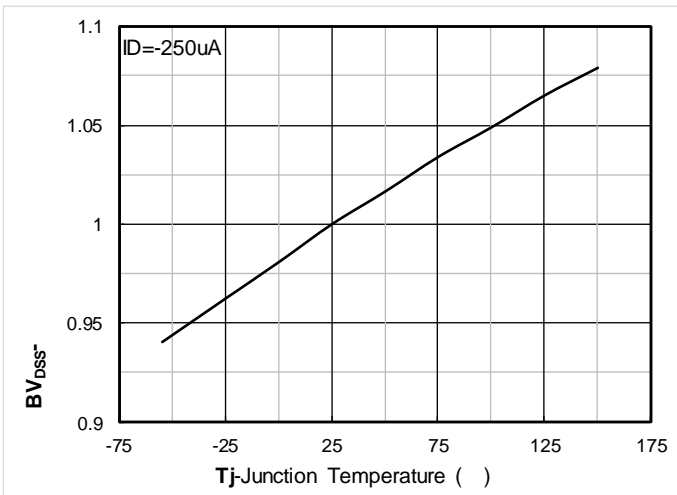


Figure 9. Normalized breakdown voltage

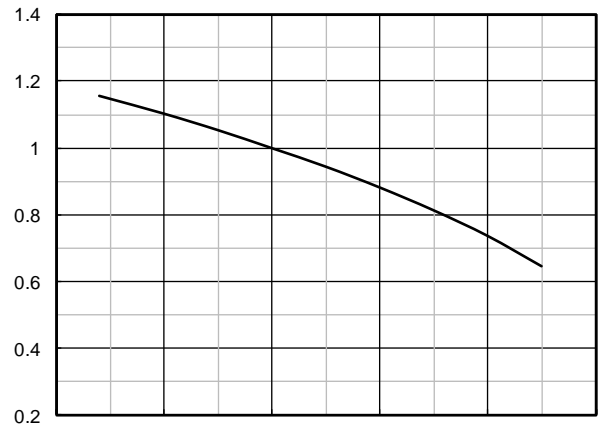


Figure 10. Normalized Threshold voltage





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