



N-Channel and P-Channel Complementary MOSFET

Product Summary

NMOS

V_{DS}	100V
I_D	1A
$R_{DS(ON)}$ (at $V_{GS}=10V$)	270m
$R_{DS(ON)}$ (at $V_{GS}=4.5V$)	344m

PMOS

V_{DS}	-100V
I_D	-0.9A
$R_{DS(ON)}$ (at $V_{GS}=-10V$)	565m
$R_{DS(ON)}$ (at $V_{GS}=-4.5V$)	640m

General Description

Voltage controlled small signal switch
Fast Switching Speed
Moisture Sensitivity Level 1
Epoxy Meets UL 94 V-0 Flammability Rating
Halogen Free

Applications

Power Management Functions
Motor Control
DC-DC convertor

Absolute Maximum Ratings ($T_J=25$ unless otherwise noted)



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

Parameter	
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NMOS Typical Electrical and Thermal Characteristics Diagrams

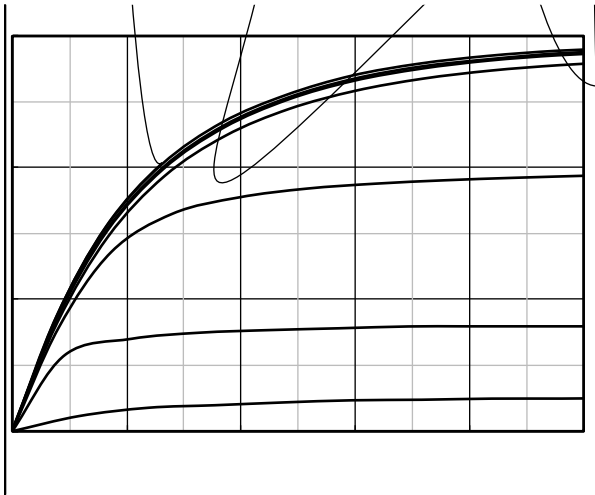


Figure 1. Output Characteristics

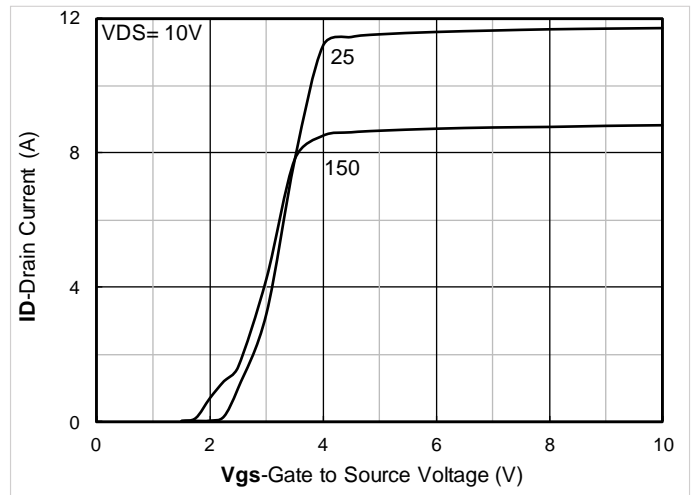


Figure 2. Transfer Characteristics

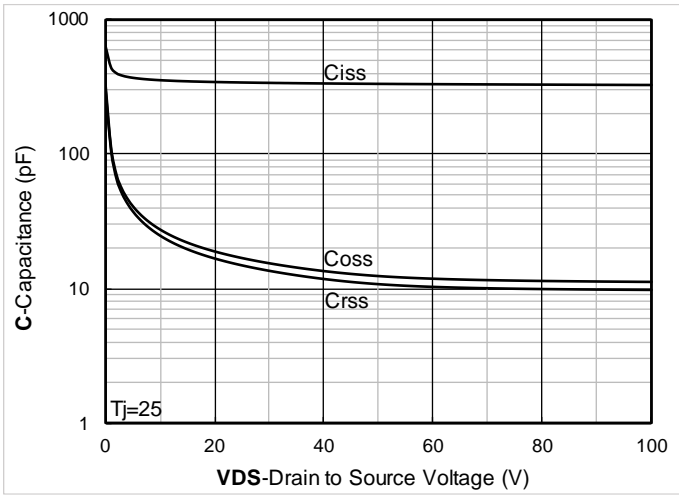


Figure 3. Capacitance Characteristics

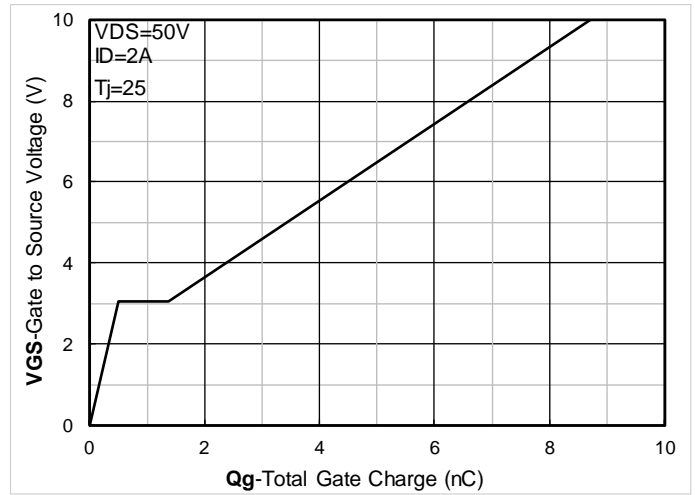
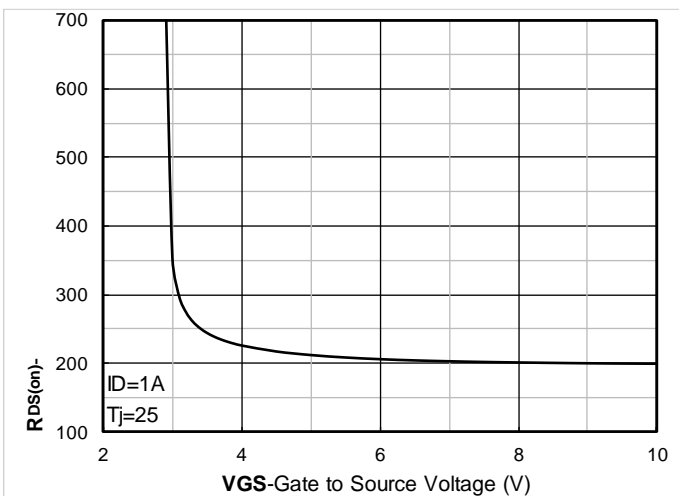


Figure 4. Gate Charge



Figure





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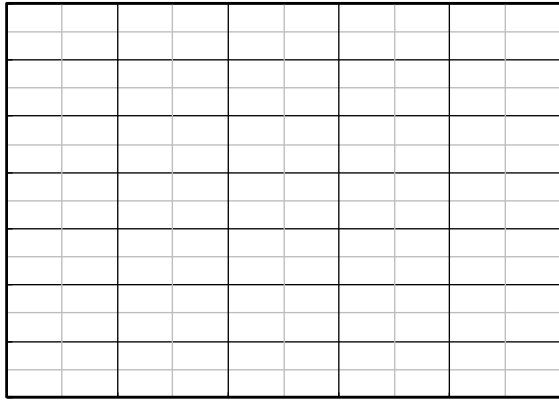


Figure 7. $R_{DS(on)}$ VS Drain Current

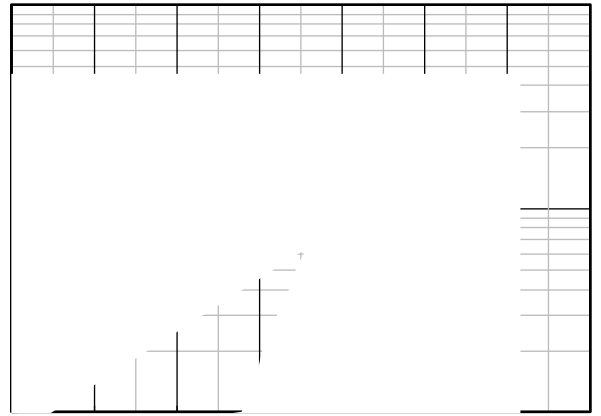


Figure 8. Forward characteristics of reverse diode

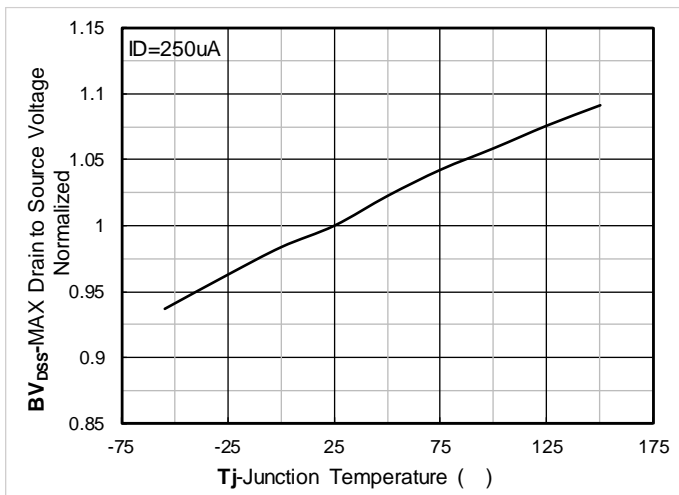


Figure 9. Normalized breakdown voltage

Figure 10. Normalized Threshold voltage

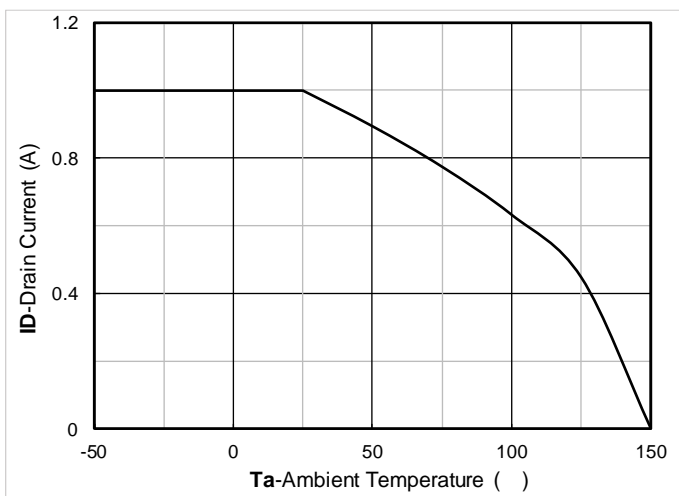


Figure 11. Current dissipation

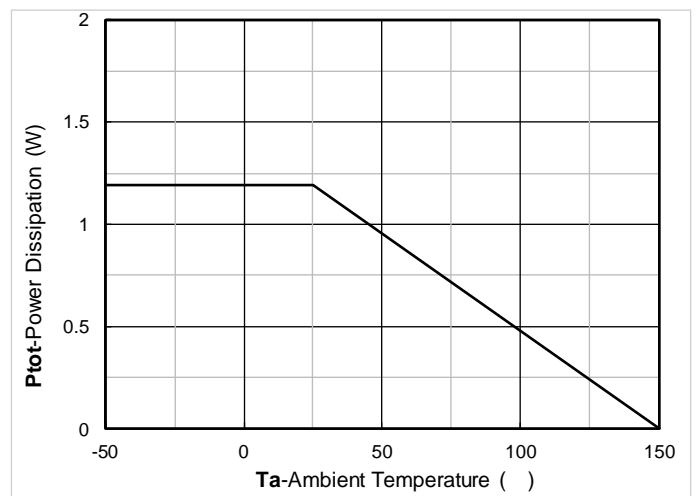


Figure 12. Power dissipation



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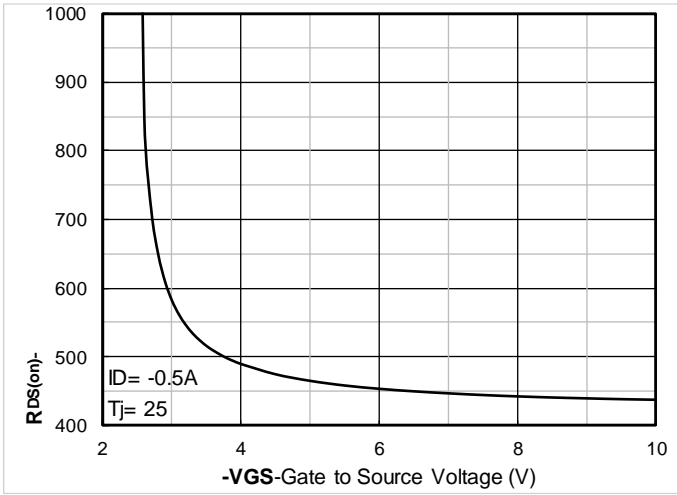


Figure 5. On-Resistance vs Gate to Source Voltage

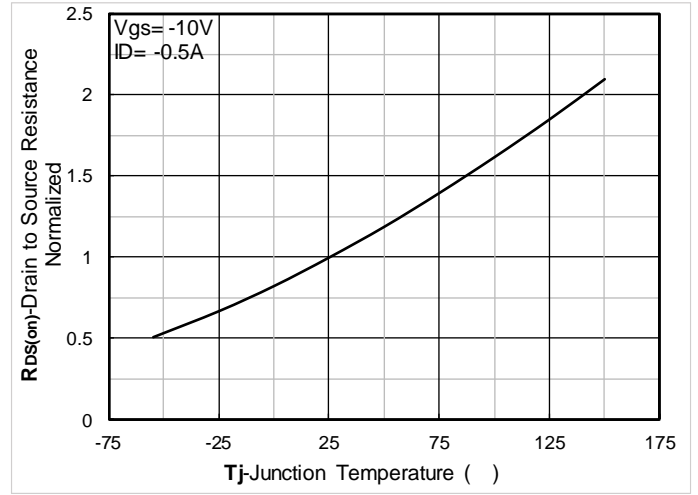


Figure 6. Normalized On-Resistance

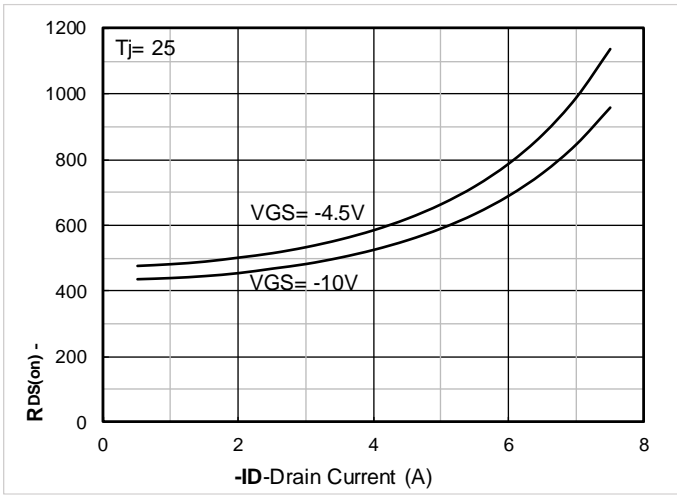


Figure 7. RDS(on) VS Drain Current

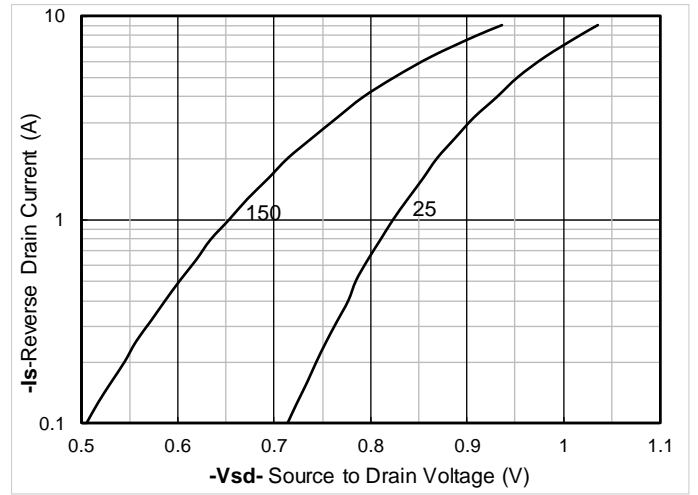


Figure 8. Forward characteristics of reverse diode

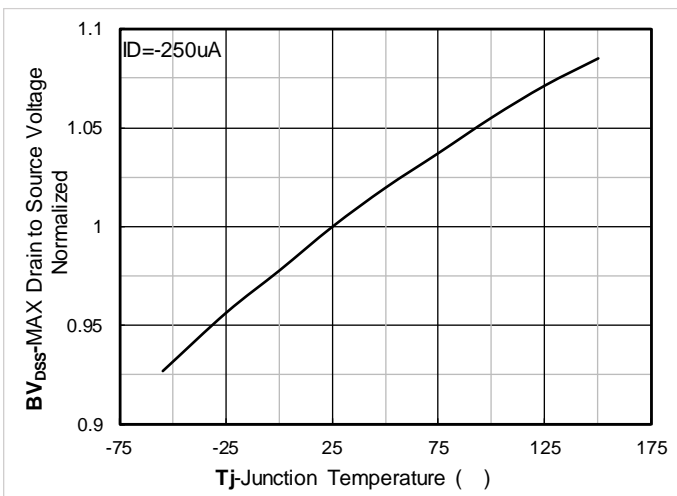


Figure 9. Normalized breakdown voltage

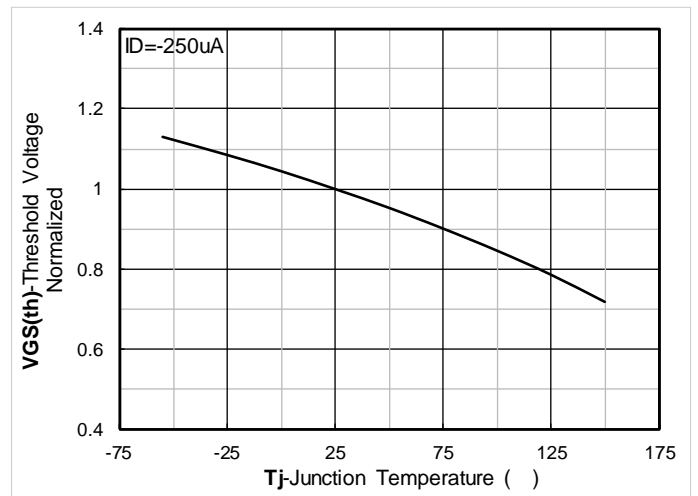


Figure 10. Normalized Threshold voltage



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PDFN3030-8L Package information

DIMENSIONS

SYM.

UNIT mm

NOTE:

- 1.PACKAGE BODY SIZES EXCLUDE MOLD FLASH AND GATE BURRS.
- 2.TOLERANCE 0.1mm UNLESS OTHERWISE SPECIFIED.
- 3.THE PAD LAYOUT IS FOR REFERENCE PURPOSES ONLY.



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