

## 100V N-Ch Power MOSFET

$V_{DS}$  100 V  
 $R_{DS(on),typ}$   $V_{GS}=10V$  22.0 m  
 $R_{DS(on),typ}$

Gate to Source Voltage  $V_{GS}$  -

$P_D$   $T_{q}$

Max

## Electrical Characteristics at $T_J=25^\circ\text{C}$ (unless otherwise specified)

### Static Characteristics

Parameter	Symbol	Conditions	Value min	Value typ	Value max	Unit
Drain to Source Breakdown Voltage	$V_{(\text{BR})\text{DSS}}$	$V_{GS}=0\text{V}, I_D=250\text{ A}$	100	-	-	V
Gate Threshold Voltage	$V_{GS(\text{th})}$	$V_{GS}=V_{DS}, I_D=250\text{ A}$	1.4	2	2.4	
Zero Gate Voltage Drain Current	$I_{DSS}$	$V_{GS}=0\text{V}, V_{DS}=100\text{V}, T_J=25^\circ\text{C}$ $V_{GS}=0\text{V}, V_{DS}=100\text{V}, T_J=100^\circ\text{C}$	-	-	1	A
Gate to Source Leakage Current	$I_{GSS}$	$V_{GS}=\pm 20\text{V}, V_{DS}=0\text{V}$	-	100	$\pm 100$	nA
Drain to Source on Resistance	$R_{DS(\text{on})}$	$V_{GS}=10\text{V}, I_D=8\text{A}$ $V_{GS}=4.5\text{V}, I_D=6\text{A}$	-	22	29	m
Transconductance			-	26	36	

### Dynamic Characteristics

Input Capacitance  $C_{GS} = 0.001265 \text{ pF}$



Figure 7. Typical Gate-Charge vs. Gate-to-Source Voltage

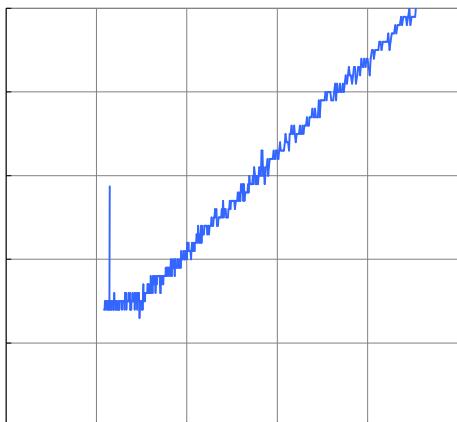


Figure 8. Typical Capacitance vs. Drain-to-Source Voltage



Figure 9. Maximum Safe Operating Area

Figure 10. Maximum Drain Current vs. Case Temperature

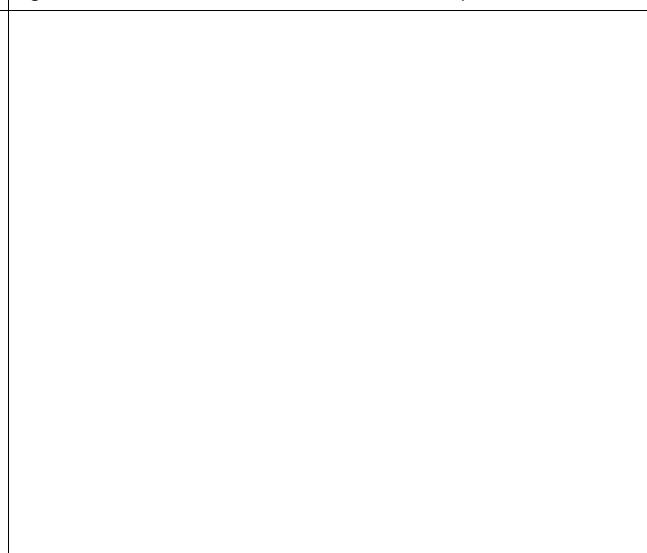
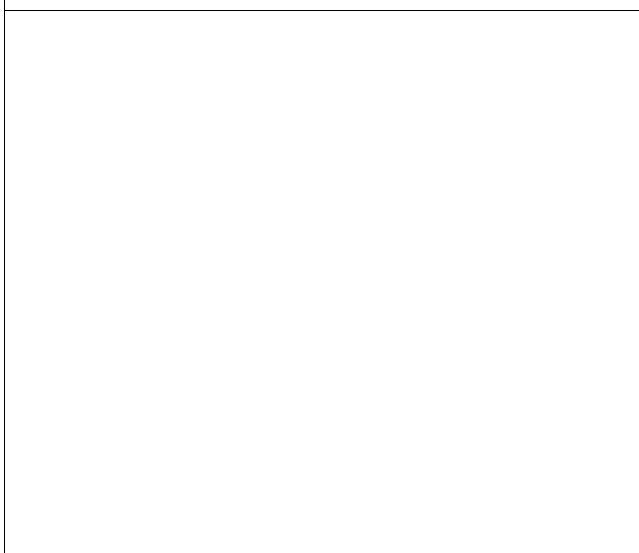
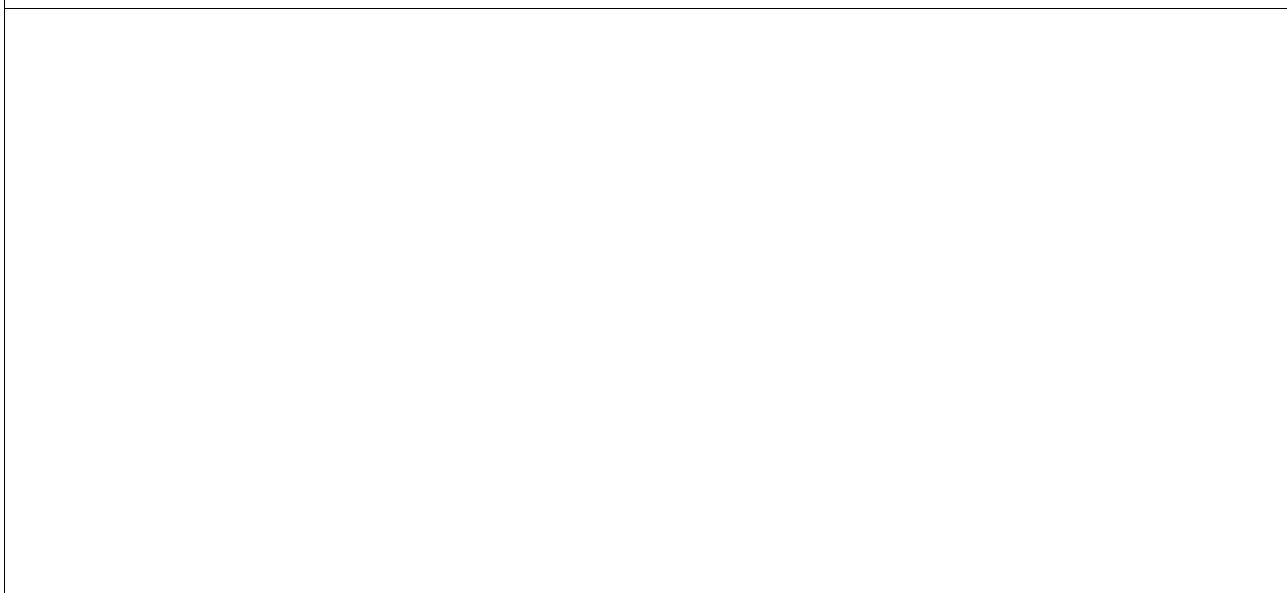


Figure 11. Normalized Maximum Transient Thermal Impedance, Junction-to-Ambient



Inductive switching Test

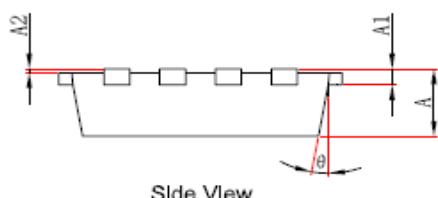
Gate Charge Test

Uclamped Inductive Switching (UIS) Test

Diode Recovery Test

## Package Outline

DFN3.3\*3.3\_P, 8 Leads



Side View

