	Outline	Reel Size	Reel(pcs)	Per Carton (pcs)
	TAPING	13"	4000	48000

Symbol		Units
V_{DS}		V
V_{GS}		V
	T_A = 25°C	
	T_A = 100°C	
I_{DM}		A
E_{AS}		mJ
P_D	T_A = 25°C	W
R		°C/W
T_J, T_{STG}		

Electrical Characteristics (T_J = 25°C unless otherwise specified)

Symbol	Parameter	Conditions	Min.	Typ.	Max.	Unit
Off Characteristics						
$V_{(BR)DSS}$	Drain-Source Breakdown Voltage	I_D = -250μA, V_{GS} = 0V	-30	-	-	V
I_{DSS}	Zero Gate Voltage Drain Current	V_{DS} = -30V, V_{GS} = 0V	-	-	-1.0	μA
I_{GSS}	Gate-Body Leakage Current	V_{DS} = 0V, V_{GS} = ±20V	-	-	±100	nA
On Characteristics						
$V_{GS(th)}$	Gate Threshold Voltage	V_{DS} = V_{GS}, I_D = -250μA	-1.0	-1.8	-2.5	V
$R_{DS(ON)}$	Static Drain-Source ON-Resistance(4)	V_{GS} = -10V, I_D = -5A	-	31	40	mΩ
		V_{GS} = -4.5V, I_D = -4A	-	46	60	mΩ
Dynamic Characteristics						
C_{iss}	Input Capacitance	V_{GS} = 0V, V_{DS} = -15V, f = 1MHz	-	540	-	pF
C_{oss}	Output Capacitance		-	75	-	pF
C_{rss}	Reverse Transfer Capacitance		-	57	-	pF
Q_g	Total Gate Charge	V_{GS} = 0 to -10V, V_{DS} = -15V, I_D = -2A	-	11	-	nC
Q_{gs}	Gate Source Charge		-	2	-	nC
Q_{gd}	Gate Drain("Miller") Charge		-	2	-	nC
Switching Characteristics						
$t_{d(on)}$	Turn-On DelayTime	V_{GS} = -10V, V_{DD} = -15V, I_D= -2A, R_{GEN} = 3Ω	-	3	-	ns
t_r	Turn-On Rise Time		-	2	-	ns
$t_{d(off)}$	Turn-Off DelayTime		-	26	-	ns
t_f	Turn-Off Fall Time		-	15	-	ns
Drain-Source Diode Characteristics and Max Ratings						
I_S	Maximum Continuous Drain to Source Diode Forward Current		-	-	-5.1	A
I_{SM}	Maximum Pulsed Drain to Source Diode Forward Current		-	-	-20	A
V_{SD}	Drain to Source Diode Forward Voltage	V_{GS} = 0V, I_S = -5.1A	-	-	-1.2	V
trr	Body Diode Reverse Recovery Time	I_F = -2A, di/dt = 100A/us	-	9	-	ns
Qrr	Body Diode Reverse Recovery Charge		-	3	-	nC

Notes: 1. Repetitive Rating: Pulse Width Limited by Maximum Junction Temperature.

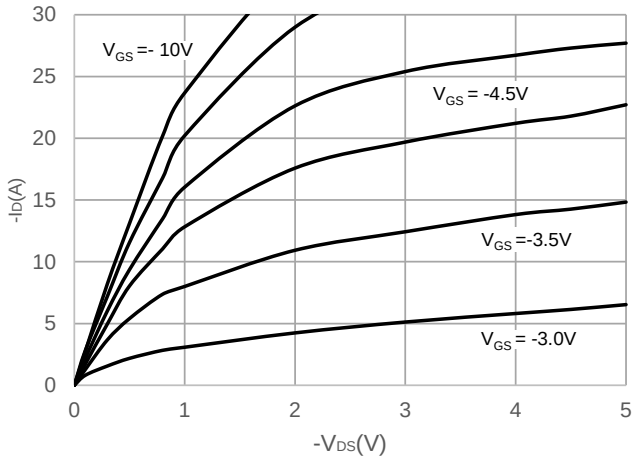
2. EAS condition: Starting T_J=25C, V_{DD}=-15V, V_G=-10V, R_G=25ohm, L=0.5mH, I_{AS}=-7A

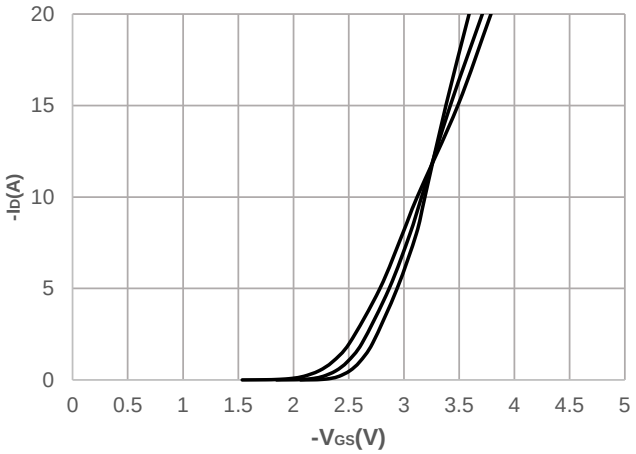
3. R is measured with the device mounted on a 1inch^2 pad of 2oz copper FR4 PCB

4. Pulse Test: Pulse Width 0.5%.

Typical Performance Characteristics

Figure 1: Output Characteristics





Test Circuit

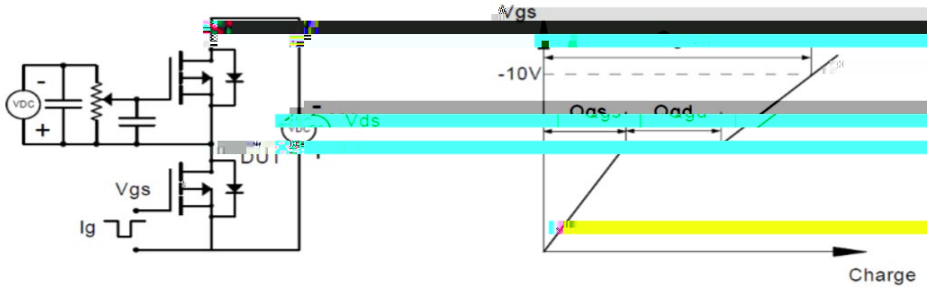


Figure 1: Gate Charge Test Circuit & Waveform

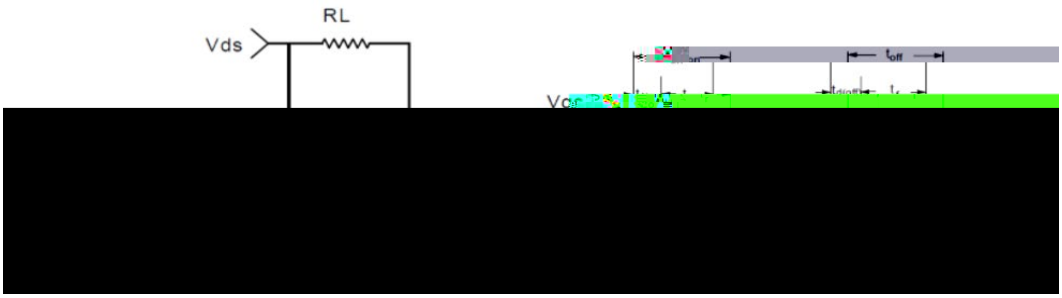


Figure 2: Resistive Switching Test Circuit & Waveform

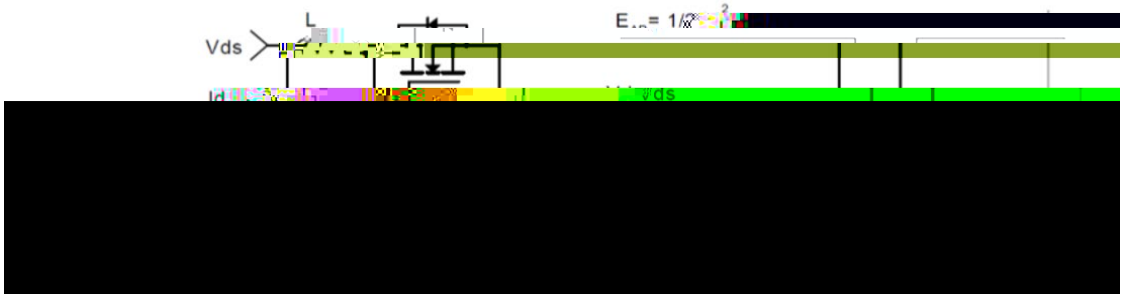


Figure 3: Unclamped Inductive Switching Test Circuit& Waveform

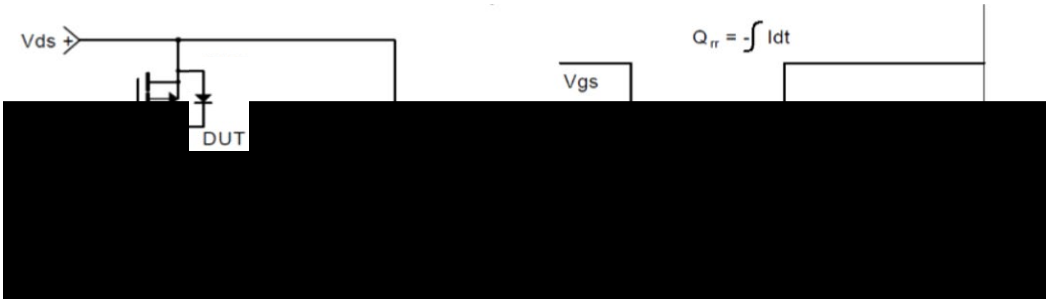


Figure 4: Diode Recovery Test Circuit & Waveform

Package Mechanical Data(SOP-8)