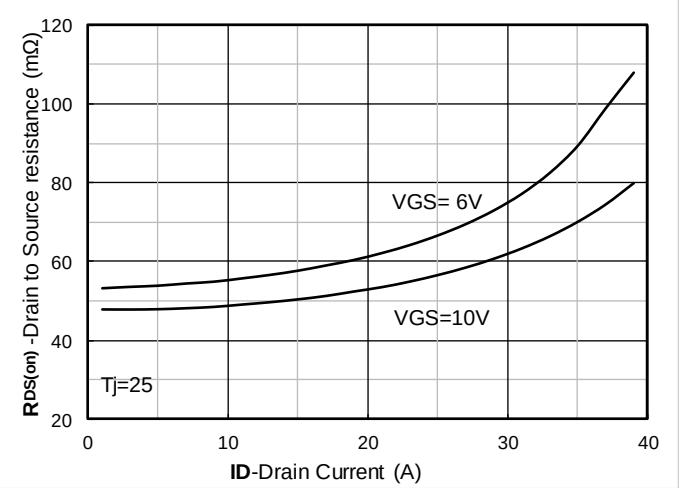
■ Electrical Characteristics (T_J=25 unless otherwise noted)

Parameter	Symbol	Conditions	Min	Typ	Max	Units
Static Parameter						
Drain-Source Breakdown Voltage	BV_{DSS}	V_{GS}= 0V, I_D=250μA	150	-	-	V
Zero Gate Voltage Drain Current	I_{DSS}	V_{DS}=150V, V_{GS}=0V	-	-	1	μA
		V_{DS}=150V, V_{GS}=0V, Tj=150	-	-	100	
Gate-Body Leakage Current	I_{GSS}	V_{GS}= ±20V, V_{DS}=0V	-	-	±100	nA
Gate Threshold Voltage	$V_{GS(th)}$	V_{DS}= V_{GS}, I_D=250μA	2	3	4	V
Static Drain-Source On-Resistance	$R_{DS(ON)}$	V_{GS}=10V, I_D=15A	-	52	70	mΩ
		V_{GS}=6V, I_D=10A	-	57	80	
Diode Forward Voltage	V_{SD}	I_S=15A, V_{GS}=0V	-	0.95	1.2	V
Gate resistance	R_G	f=1MHz	-	1	-	Ω
Maximum Body-Diode Continuous Current	I_S		-	-	15	A
Dynamic Parameters						
Input Capacitance	C_{iss}	V_{DS}=75V, V_{GS}=0V, f=1MHz	-	740	-	pF
Output Capacitance	C_{oss}		-	65	-	
Reverse Transfer Capacitance	C_{rss}		-	5	-	
Switching Parameters						
Total Gate Charge	Q_g	V_{GS}=10V, V_{DS}=75V, I_D=15A	-	13	-	nC
Gate-Source Charge	Q_{gs}		-	3	-	
Gate-Drain Charge	Q_{gd}		-	4	-	
Reverse Recovery Charge	Q_{rr}	I_F=15A, di/dt=100A/us	-	122	-	nC
Reverse Recovery Time	t_{rr}		-	62	-	ns
Turn-on Delay Time	$t_{D(on)}$	V_{GS}=10V, V_{DD}=75V, I_D=15A R_{GEN}=2.2Ω	-	2	-	ns
Turn-on Rise Time	t_r		-			



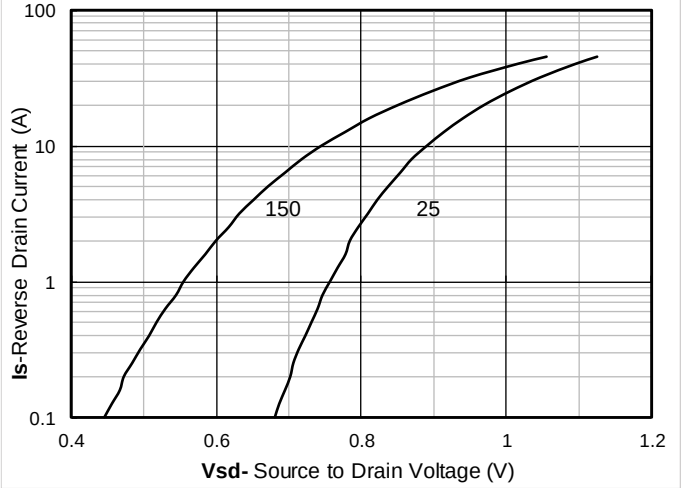
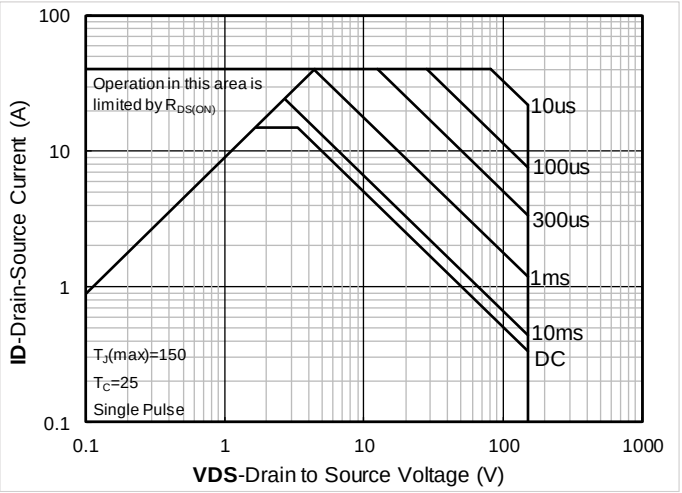


Figure 7. RDS(

reaonDo32(li)-15tFa

urTe


100
10
1
0.1
Operation in this area is
limited by $R_{DS(ON)}$
10us
100us
300us
1ms
10ms
DC
T_J(max)=150
T_C=25
Single Pulse
0.1
1
10
100
1000
ID-Drain-Source Current (A)
VDS-Drain to Source Voltage (V)

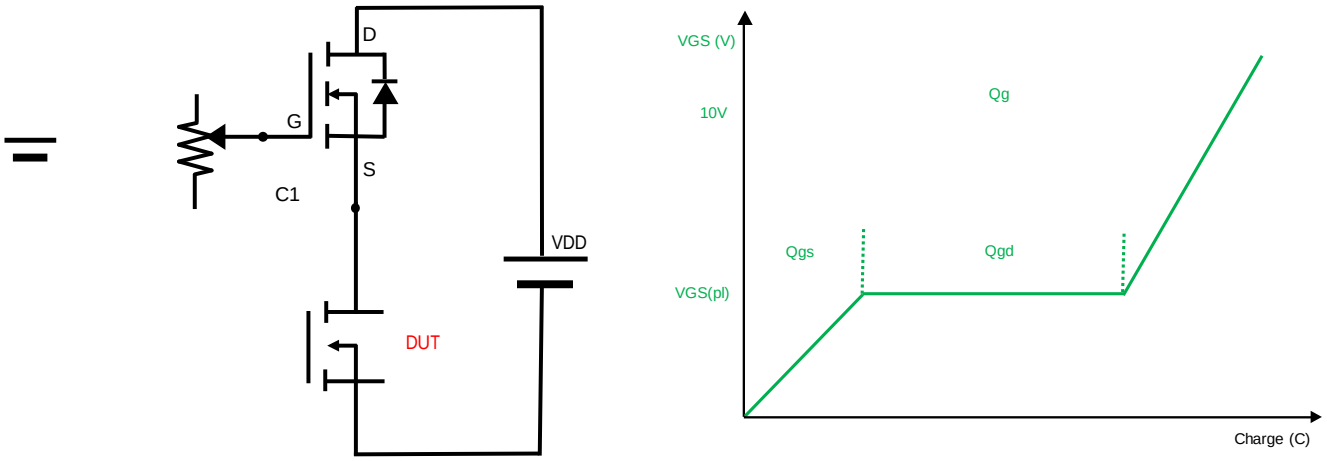


Figure B. Gate Charge Test Circuit & Waveform

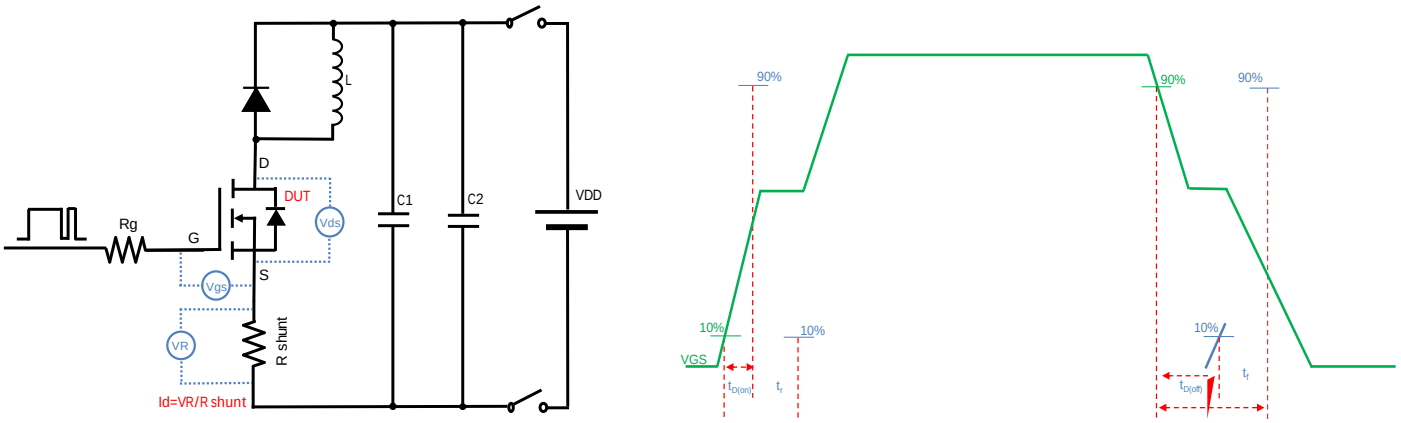


Figure C. Resistive Switching Test Circuit & Waveform

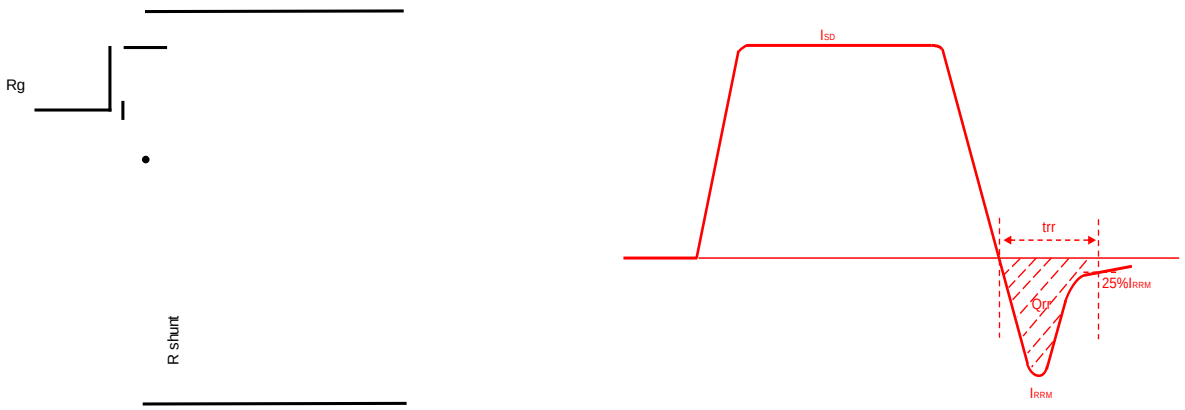


Figure D. Diode Recovery Test Circuit & Waveform

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