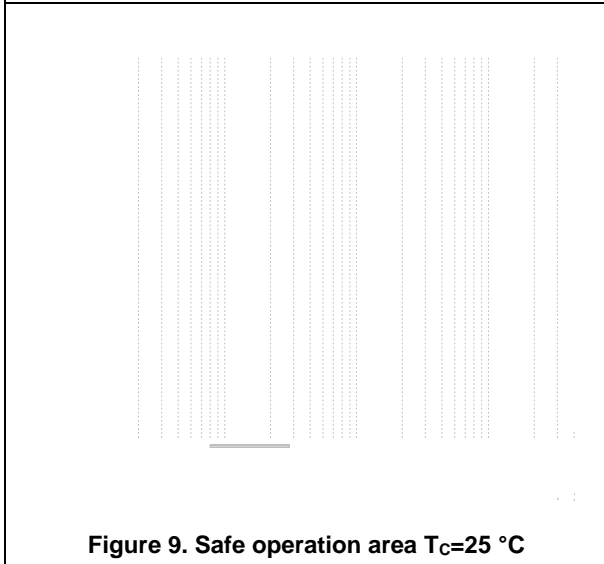
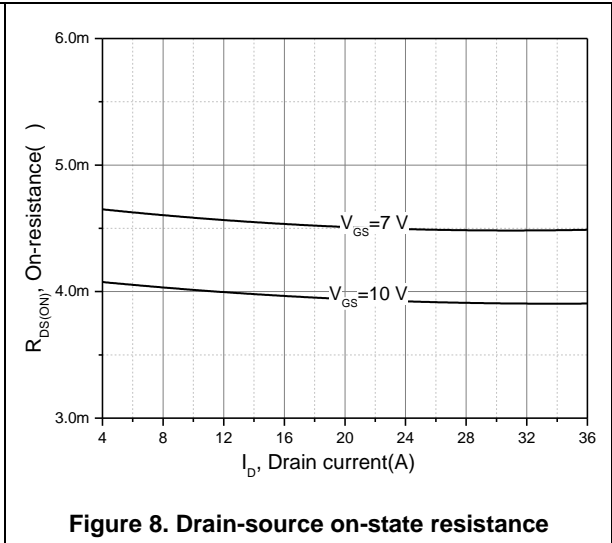
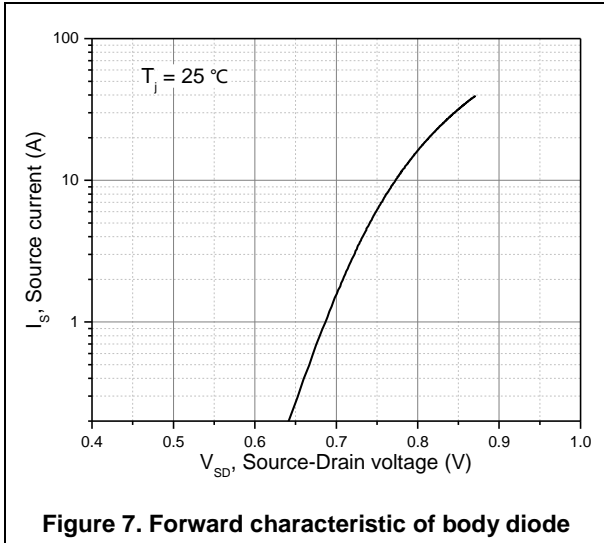


Absolute Maximum Ratings at $T_j=25$ unless otherwise noted

Parameter	Symbol	Value	Unit
Drain-source voltage	V_{DS}	100	V
Gate-source voltage	V_{GS}	± 20	V
Continuous drain current ¹⁾ , $T_C=25$ °C	I_D	130	A
Pulsed drain current ²⁾ , $T_C=25$ °C	$I_{D, pulse}$	390	A
Continuous diode forward current ¹⁾ , $T_C=25$ °C	I_S	130	A
Diode pulsed current ²⁾ , $T_C=25$ °C	$I_{S, pulse}$	390	

Dynamic Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test condition
Input capacitance	C_{iss}		6388.6		pF	$V_{GS}=0\text{ V}$, $V_{DS}=50\text{ V}$, Hz
Output capacitance	C_{oss}		923.3		pF	
Reverse transfer capacitance	C_{rss}		1.4		pF	
Turn-on delay time	$t_{d(on)}$		30.9		ns	$V_{GS}=10\text{ V}$, $V_{DS}=50\text{ V}$, R_G $I_D=25\text{ A}$



Test circuits and waveforms

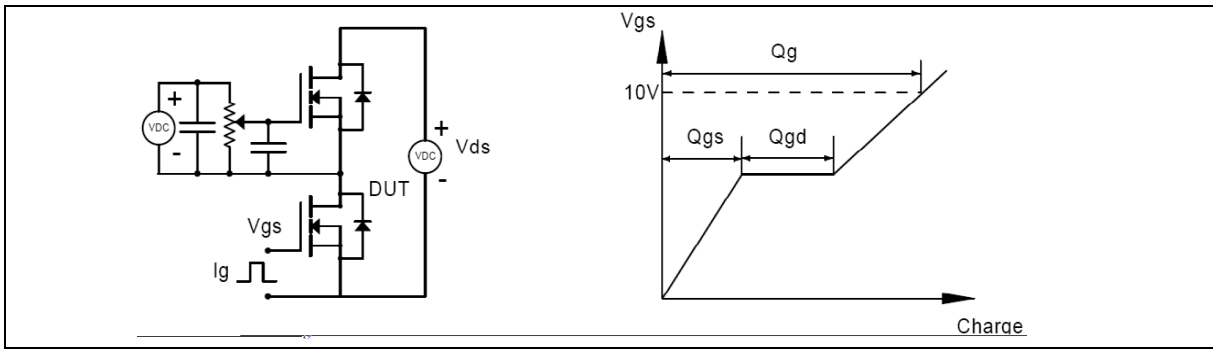


Figure 1. Gate charge test circuit & waveform



Figure 2. Switching time test circuit & waveforms

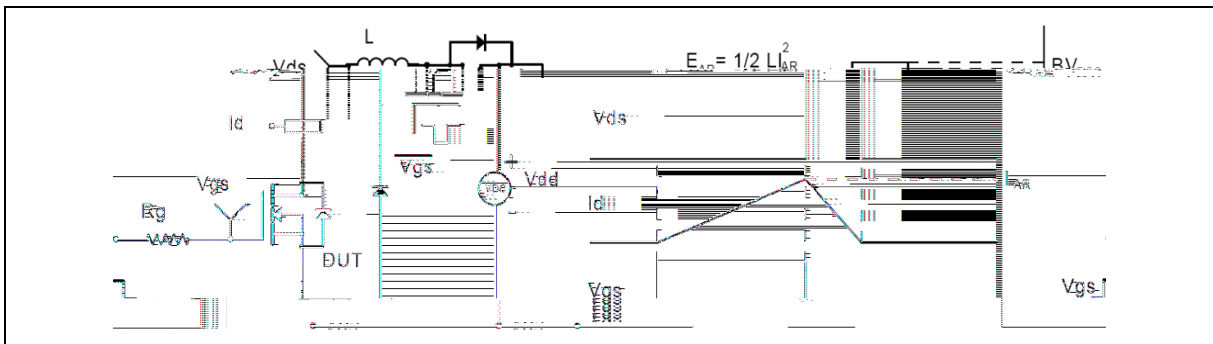


Figure 3. Unclamped inductive switching (UIS) test circuit & waveforms

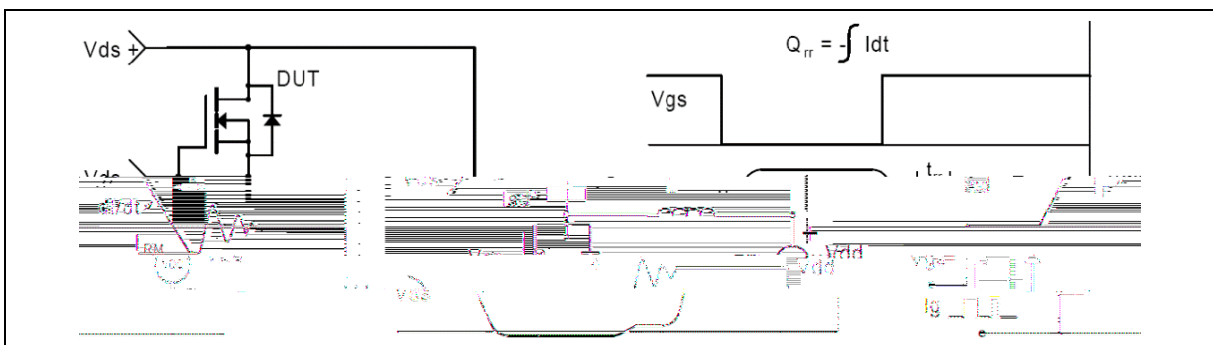
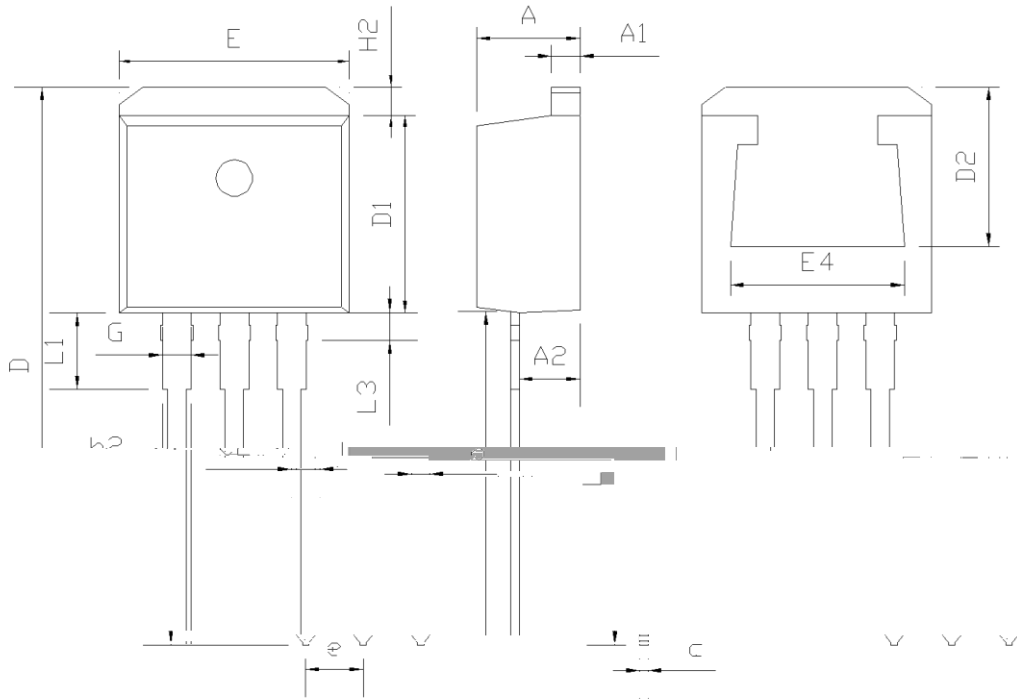


Figure 4. Diode reverse recovery test circuit & waveforms

Package Information



Symbol	mm		
	Min	Nom	Max
A	4.37	4.57	4.77
A1	1.22	1.27	1.42
A2	2.49	2.69	2.89
b	0.71	0.81	0.96
b2	1.17	1.27	1.42
c	0.28	0.38	0.53
D	23.20	23.70	24.02
D1	8.50	8.70	8.90
D2	6.00	-	-
E	9.86	10.16	10.36
E4	7.06	-	-
e	2.54BSC		
H2	-	-	1.50
L	13.33	13.73	14.13
L1	3.50	3.75	4.00
L3	1.28	1.43	1.58
G	1.25	1.35	1.50

Version 1: TO262-C package outline dimension

Ordering Information

Package Type	Units/ Tube	Tubes/ Inner Box	Units/ Inner Box	Inner Boxes/ Carton Box	Units/ Carton Box
TO262-C	50	20	1000	6	6000

Product Information

Product	Package	Pb Free	RoHS	Halogen Free
SFG10R05IF	TO262	yes	yes	yes