



**Absolute Maximum Ratings** at  $T_j=25^\circ\text{C}$  unless otherwise noted

Parameter	Symbol	Value	Unit
Drain-source voltage	$V_{DS}$	80	V
Gate-source voltage	$V_{GS}$	$\pm 20$	V
Continuous drain current <sup>1)</sup> , $T_C=25^\circ\text{C}$	$I_D$	11	A
Pulsed drain current <sup>2)</sup> , $T_C=25^\circ\text{C}$	$I_{D, \text{pulse}}$	44	A
Continuous diode forward current <sup>1)</sup> , $T_C=25^\circ\text{C}$	$I_S$	11	A
Diode pulsed current <sup>2)</sup> , $T_C=25^\circ\text{C}$	$I_{S, \text{pulse}}$	44	

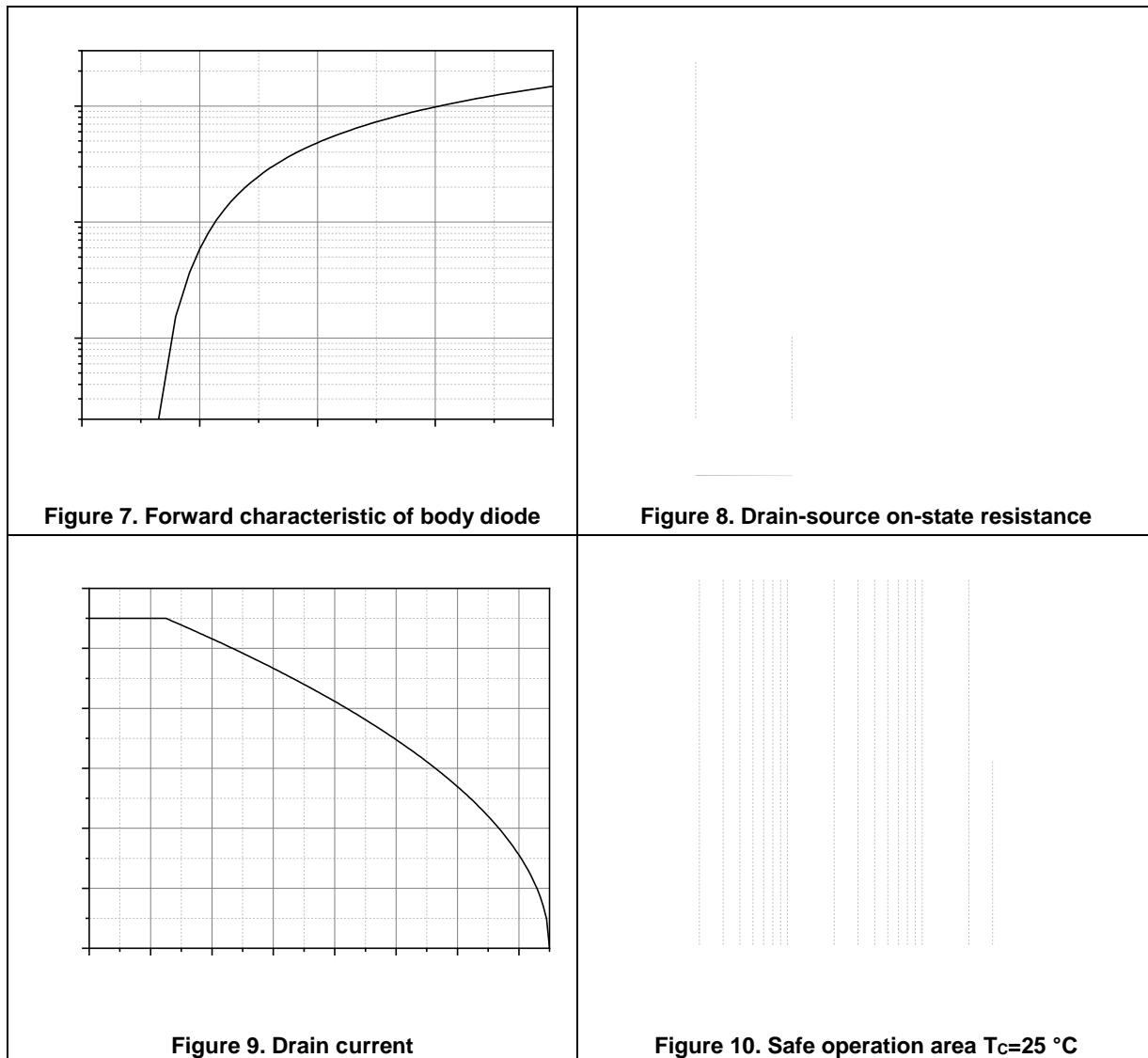
**Dynamic Characteristics**

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test condition
Input capacitance	C <sub>iss</sub>		2057.0		pF	V <sub>GS</sub> =0 V, V <sub>DS</sub> =50 V, 00 kHz
Output capacitance	C <sub>oss</sub>		480.1		pF	

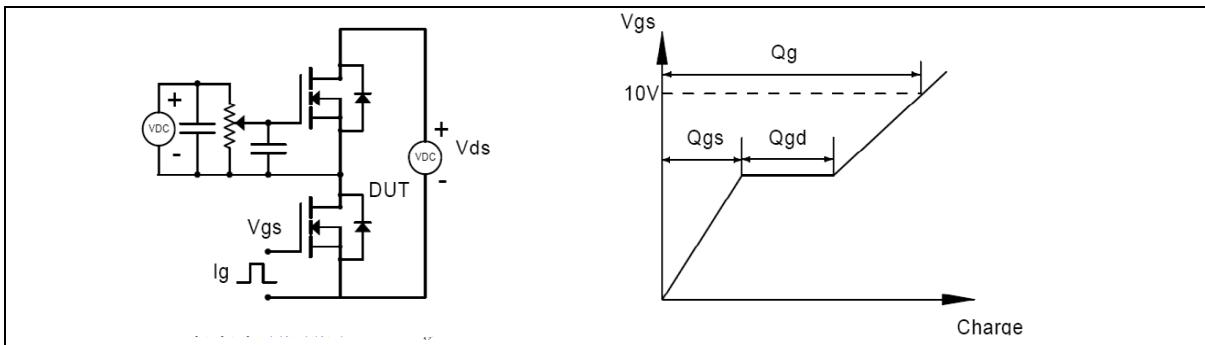
**SFG08S10BF**

Enhancement Mode N-Channel Power MOSFET

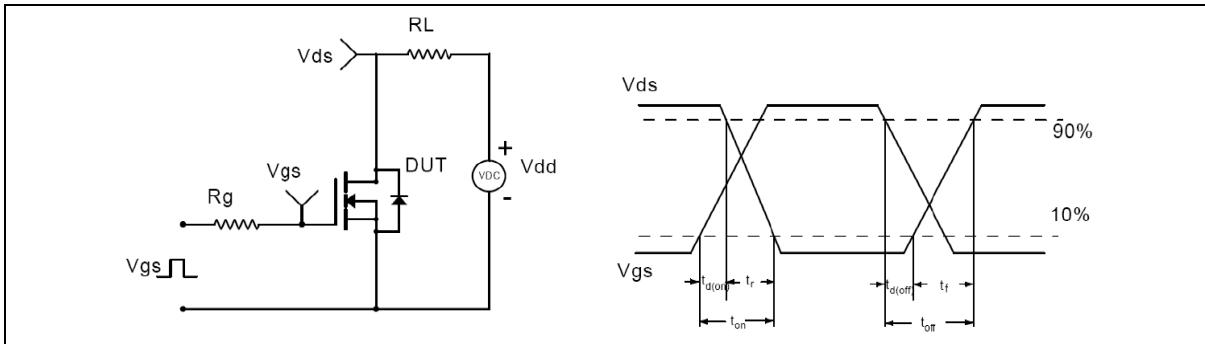




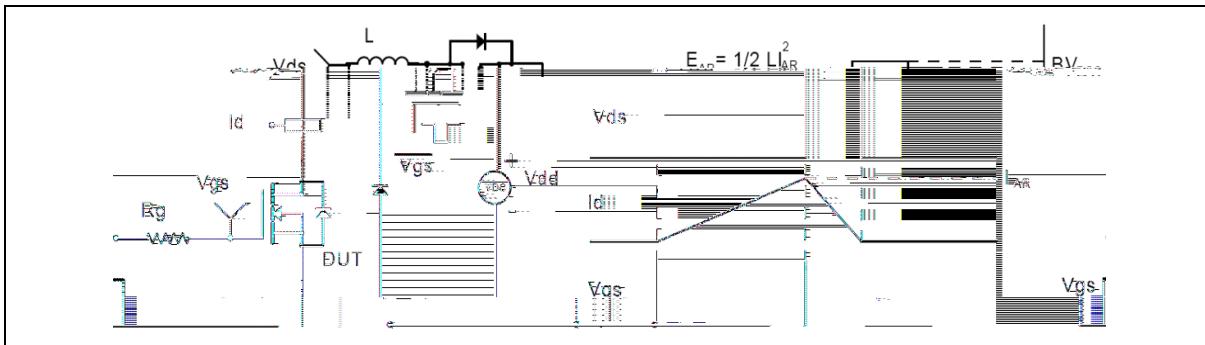
### Test circuits and waveforms



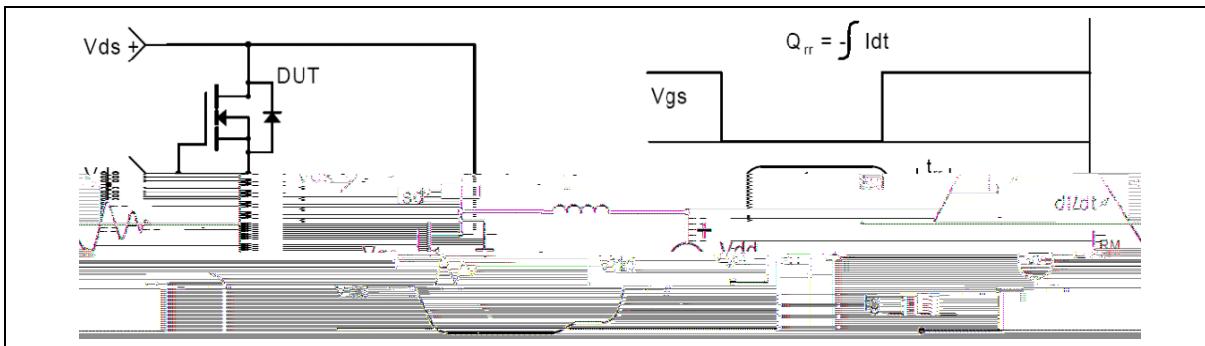
**Figure 1. Gate charge test circuit & waveform**



**Figure 2. Switching time test circuit & waveforms**

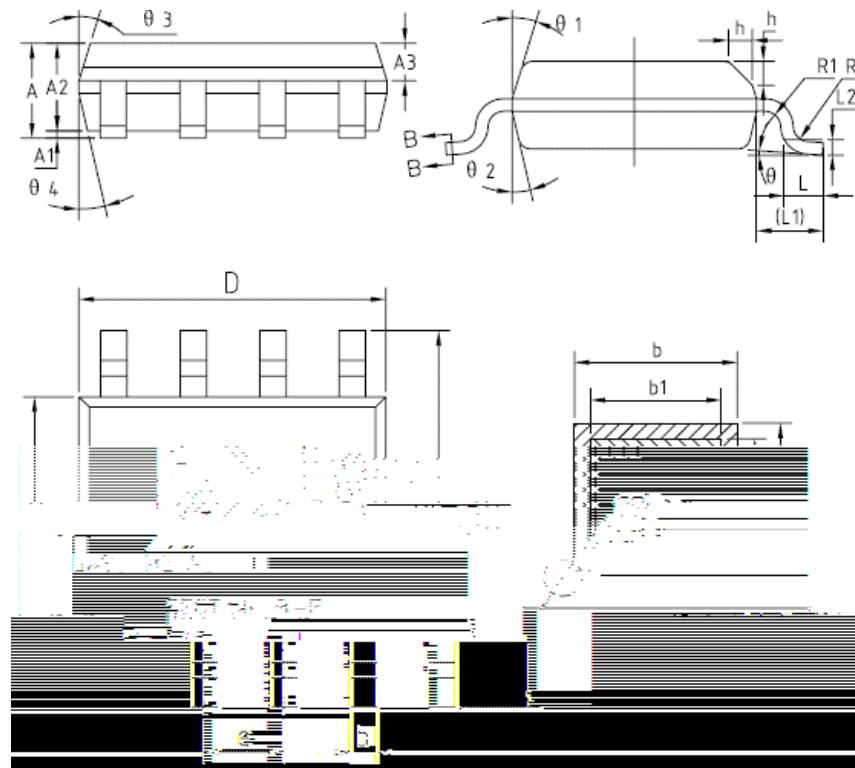


**Figure 3. Unclamped inductive switching (UIS) test circuit & waveforms**



**Figure 4. Diode reverse recovery test circuit & waveforms**

## Package Information



Symbol	mm		
	Min	Nom	Max
A	1.35	1.55	1.75
A1	0.10	0.15	0.25
A2	1.25	1.40	1.65
A3	0.50	0.60	0.70
b	0.38	-	0.51
L1	1.04REF		
L2	0.25BSC		
b1	0.37	0.42	0.47
c	0.18	-	0.25
c1	0.17	0.20	0.23
D	4.80	4.90	5
E	5.80	6.00	6.20
E1	3.80	3.90	4.00
e	1.17	1.27	1.37
L	0.45	0.60	0.80
R	0.07	-	-
R1	0.07	-	-
h	0.30	0.40	0.50
	0	-	

Version 1: SOP8-K package outline dimension

## Ordering Information

Package Type	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Carton Box	Units/Carton Box
SOP8-K	2500	2	5000	6	30000

## Product Information

Product	Package	Pb Free	RoHS	Halogen Free
SFG08S10BF	SOP8	yes	yes	yes

