

0 N V W U - N L R R W

The high V_{th} series is specially designed to use in power supply systems with driving voltage of more than 10V.

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Y Y U R R W

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- Solar inverter
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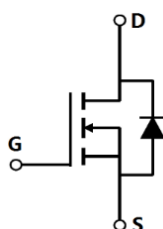
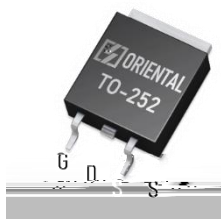
4 N b 9 N O X V W L N 9 V N N

Parameter	Value	Unit
$V_{DS, min} @ T_{j(max)}$	100	V
$I_D, pulse$	345	A
$R_{DS(ON), max} @ V_{GS}=10V$	5.5	
Q_g	72.1	nC

6 T R V P 2 M X V R W

Product Name	Package	Marking
SFS10R055DNF	TO252	SFS10R055DN

9 L T P N 9 R W R O X V R W



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

Dynamic Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test condition
Input capacitance	C_{iss}		5007		μF	$V_{GS}=0\text{ V}$, $V_{DS}=25\text{ V}$, Hz

Enhancement Mode N-

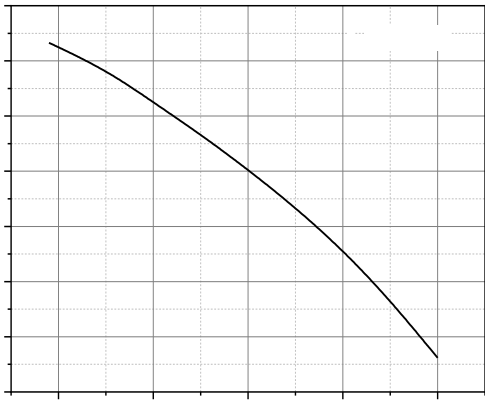


Figure 7. Threshold voltage

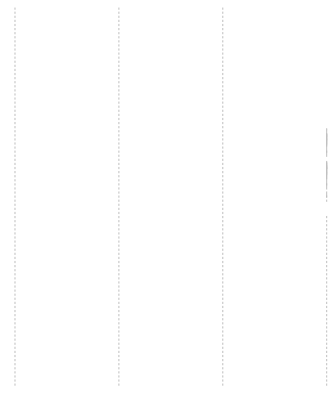


Figure 8. Forward characteristic of body diode

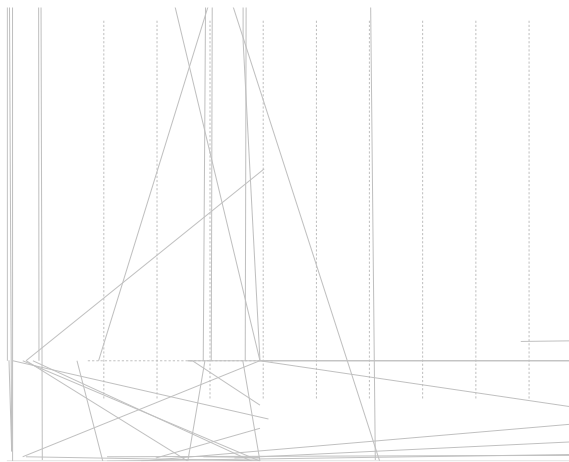


Figure 9. Drain-source on-state resistance



Figure 10. Drain current

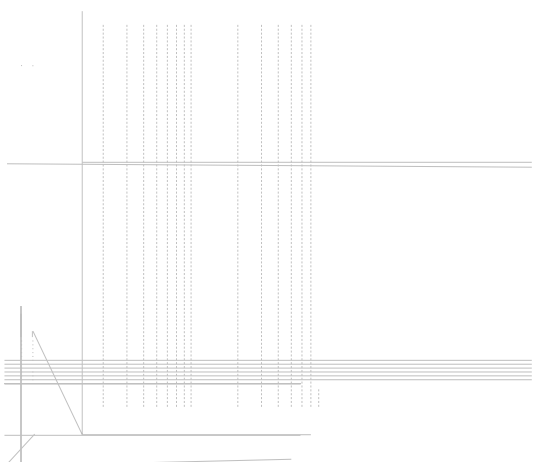


Figure 11. Safe operation area $T_c=25$

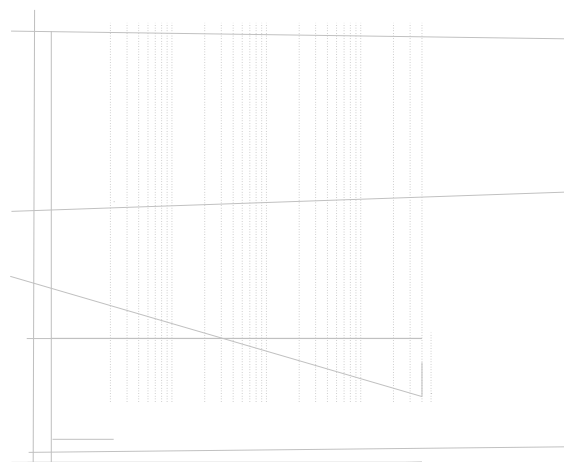


Figure 12. Max. transient thermal impedance

Test circuits and waveforms

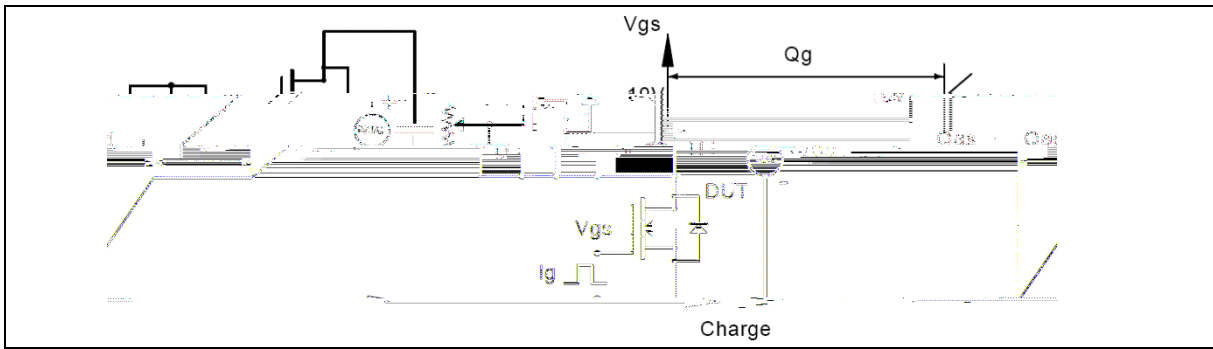


Figure 1. Gate charge test circuit & waveform

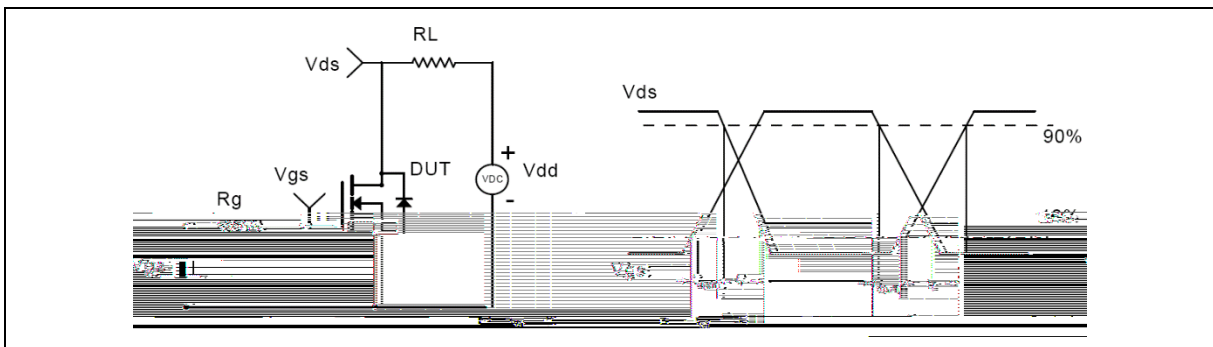


Figure 2. Switching time test circuit & waveforms

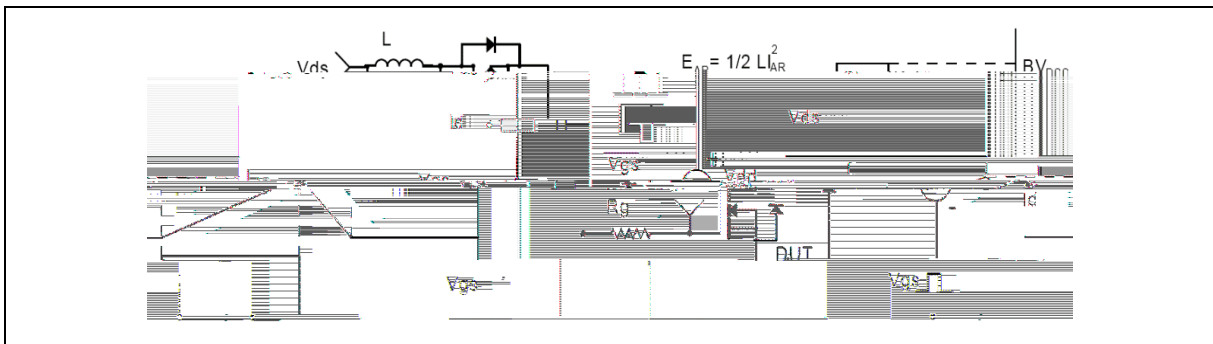


Figure 3. Unclamped inductive switching (UIS) test circuit & waveforms

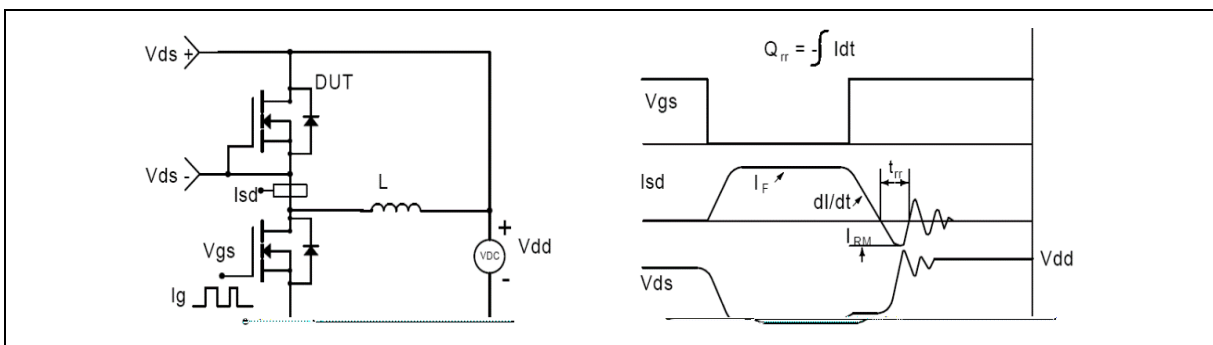
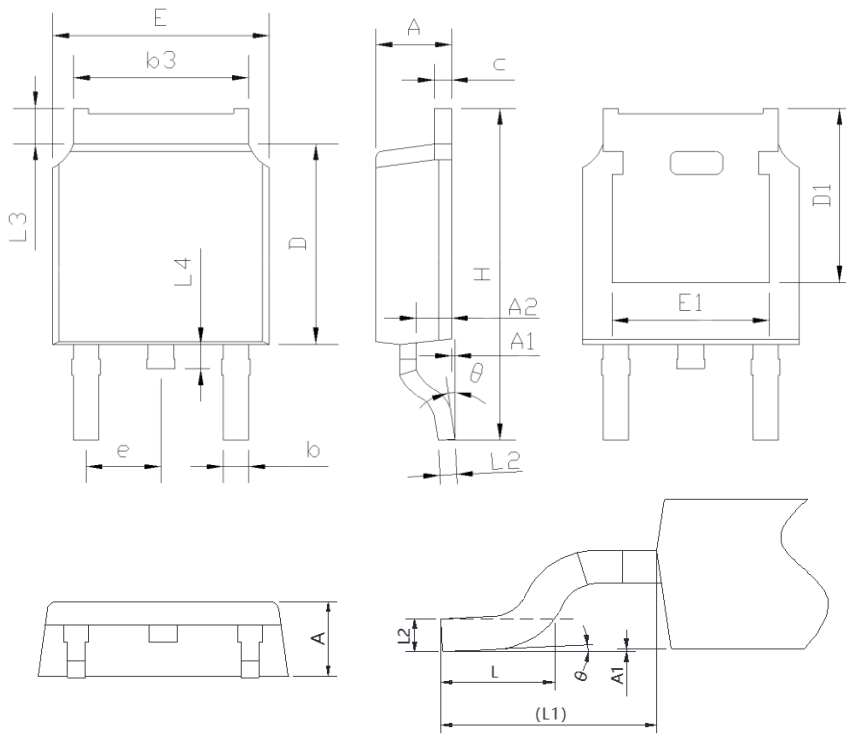


Figure 4. Diode reverse recovery test circuit & waveforms

Package Information



Symbol	mm		
	Min	Nom	Max
A	2.20	2.30	2.38
A1	0.00	-	0.20
A2	0.97	1.07	1.17
b	0.68	0.78	0.90
b3	5.20	5.33	5.46
c	0.43	0.53	0.61
D	5.98	6.10	6.22
D1	5.30 REF		
E	6.40	6.60	6.73
E1	4.63	-	-
e	2.286 BSC		
H	9.40	10.10	10.50
L	1.38	1.50	1.75
L1	2.90 REF		
L2	0.51 BSC		
L3	0.88	-	1.28
L4	0.50	-	1.00
	0	-	

Version 1: TO252-P package outline dimension

Ordering Information

Package Type	Units/ Reel	Reels/ Inner Box	Units/ Inner Box	Inner Boxes/ Carton Box	Units/ Carton Box
TO252-P	2500	2	5000	5	25000

Product Information

Product	Package	Pb Free	RoHS	Halogen Free
SFS10R055DNF	TO252	yes	yes	yes

5NP U-RLUR/N

8 RW U NV R.XVM L X , X 5 M U R N N NM /

