

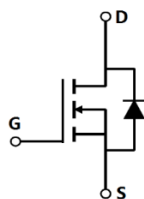
The GreenMOS[®] high voltage MOSFET utilizes charge balance technology to achieve outstanding low on-resistance and lower gate charge. It is engineered to minimize conduction loss, provide superior switching performance and robust avalanche capability.

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Parameter	Value	Unit
$V_{DS, min} @ T_{j(max)}$	650	V
$I_D, pulse$	90	A
$R_{DS(ON), max} @ V_{GS}=10V$	108	
Q_g	56.7	nC

Product Name	Package	Marking
OSG60R108HSZF	TO247	OSG60R108HSZ

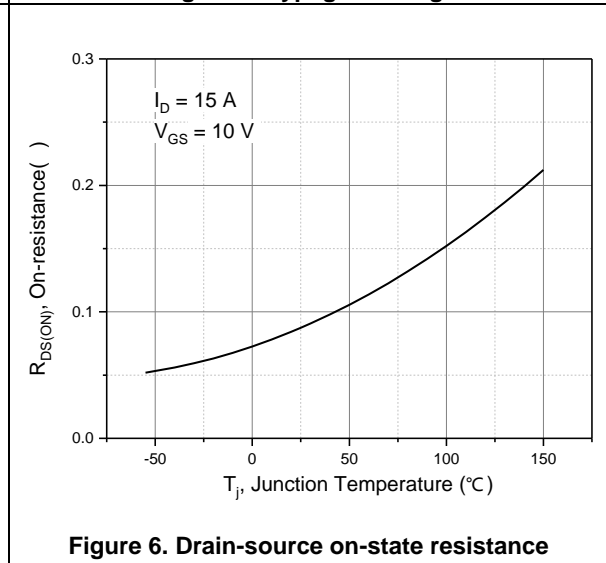
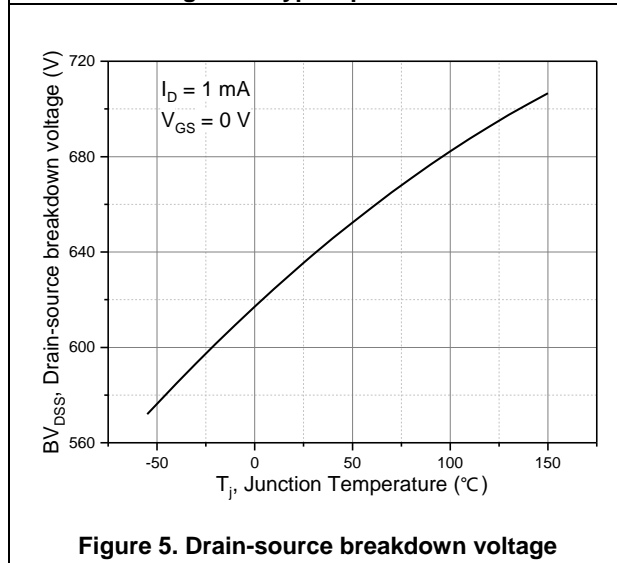
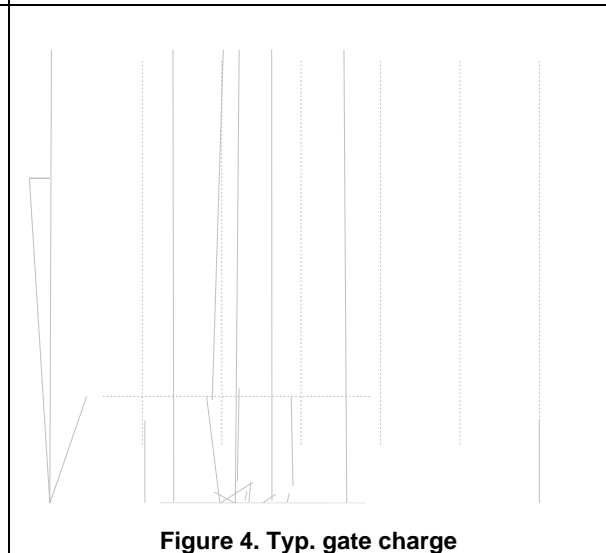
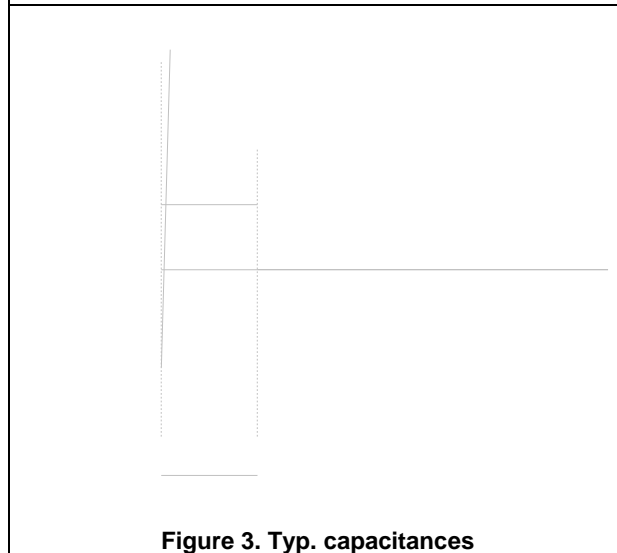
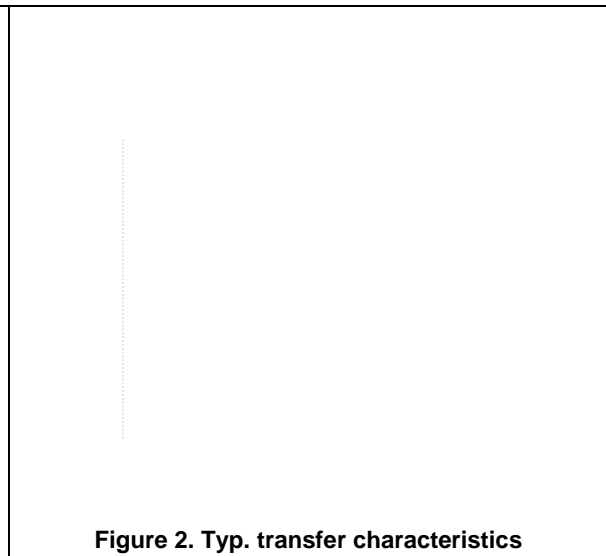
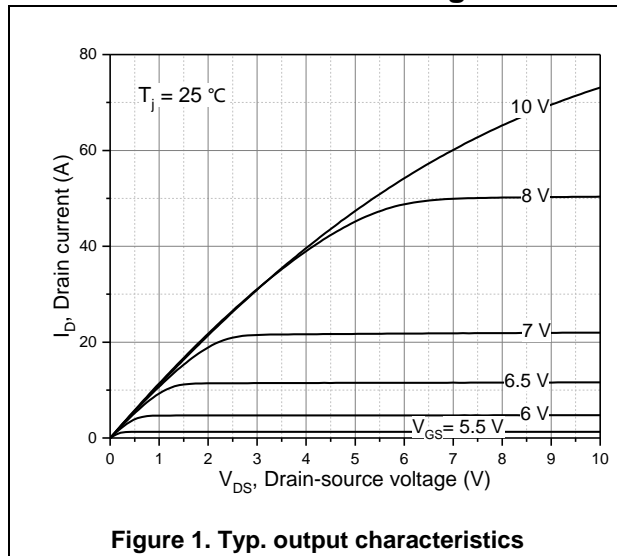


Absolute Maximum Ratings at $T_j=25$ unless otherwise noted

Dynamic Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test condition
Input capacitance	C_{iss}		2878.2		pF	$V_{GS}=0\text{ V}$, $V_{DS}=50\text{ V}$, Hz
Output capacitance	C_{oss}		226.7		pF	
Reverse transfer capacitance	C_{rss}		8.3		pF	
Turn-on delay time	$t_{d(on)}$		56.8		ns	$V_{GS}=10\text{ V}$, $V_{DS}=400\text{ V}$, R_G $I_D=16\text{ A}$
Rise time	t_r		63.1		ns	
Turn-off delay time	$t_{d(off)}$		116.1		ns	
Fall time	t_f		7.1		ns	

Electrical Characteristics Diagrams



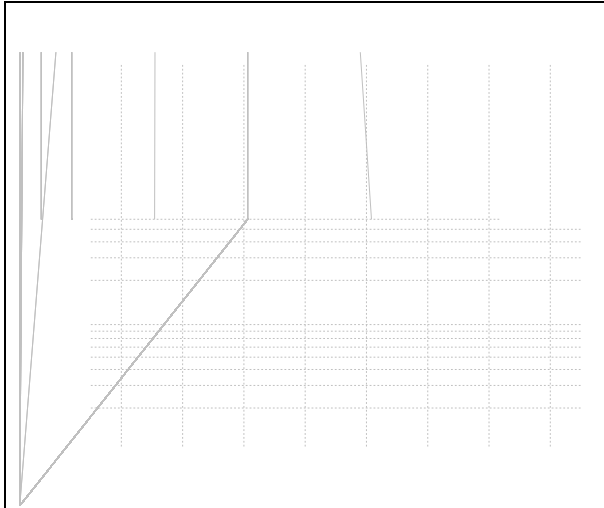


Figure 7. Forward characteristic of body diode

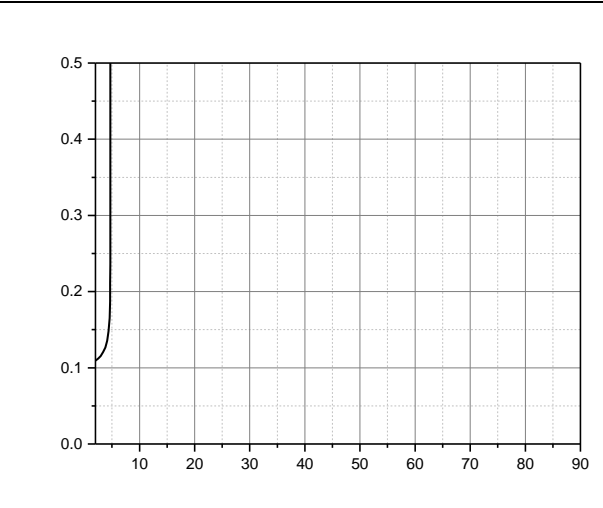


Figure 8. Drain-source on-state resistance

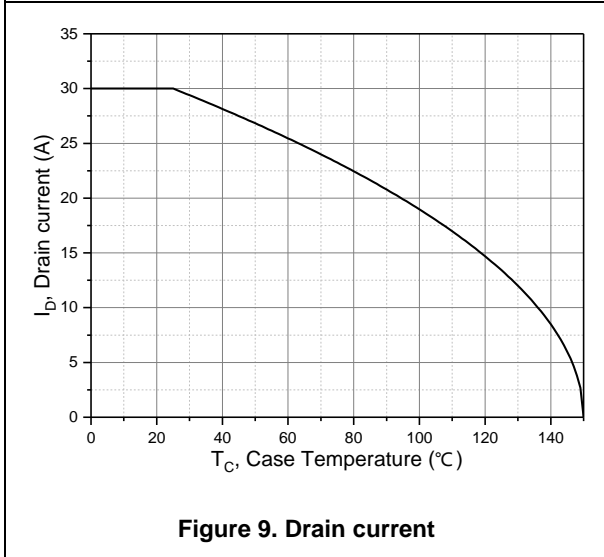


Figure 9. Drain current

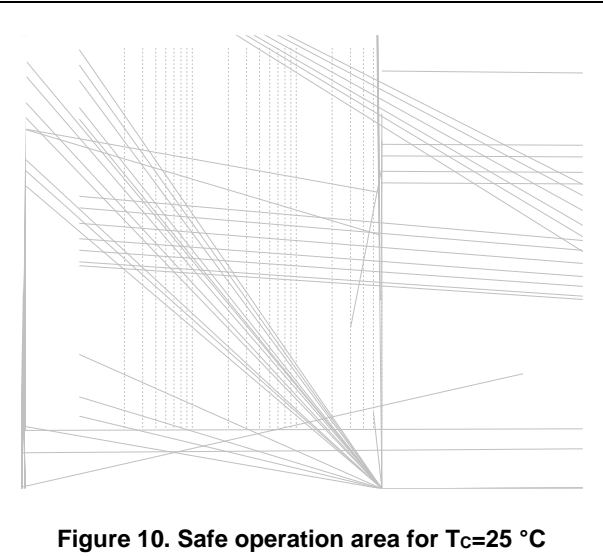


Figure 10. Safe operation area for T_C=25 °C

Test circuits and waveforms

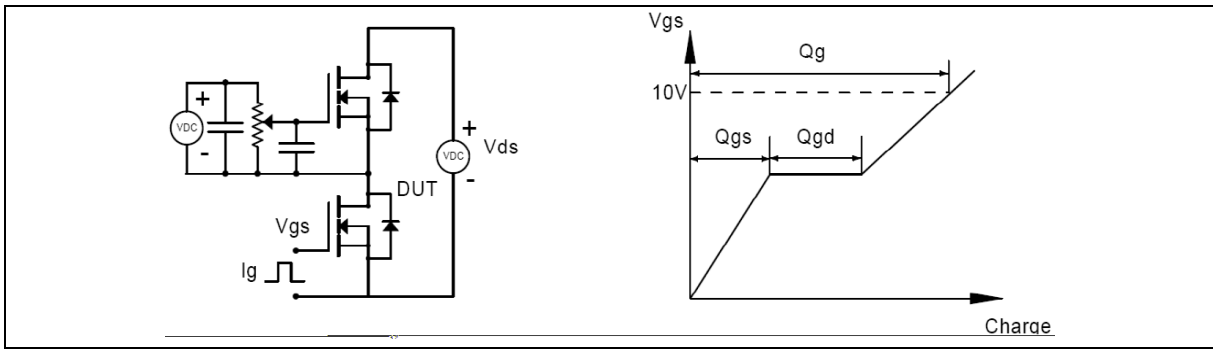


Figure 1. Gate charge test circuit & waveform

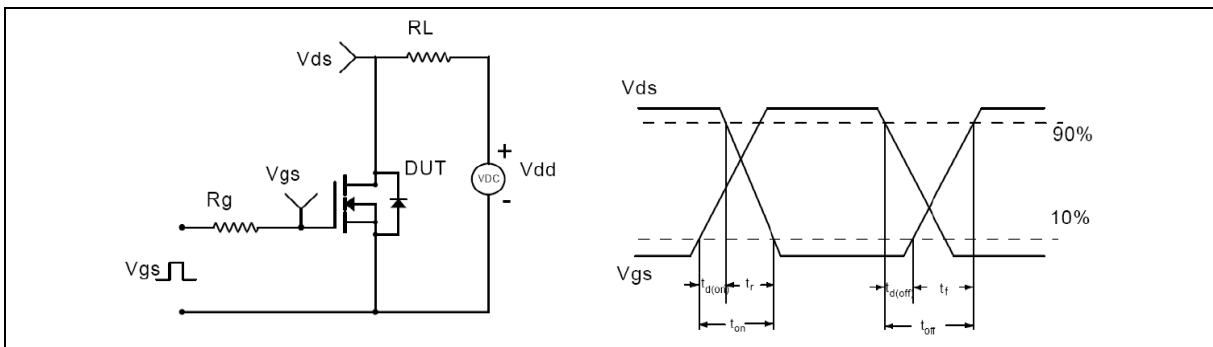


Figure 2. Switching time test circuit & waveforms

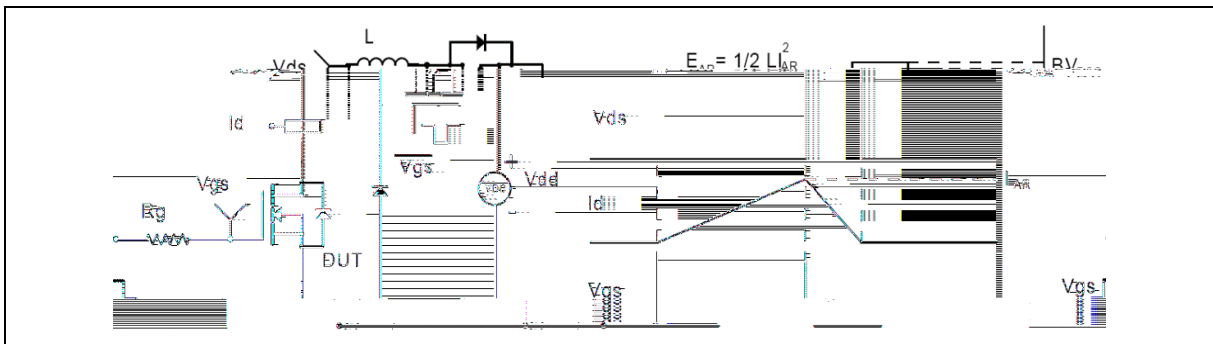


Figure 3. Unclamped inductive switching (UIS) test circuit & waveforms

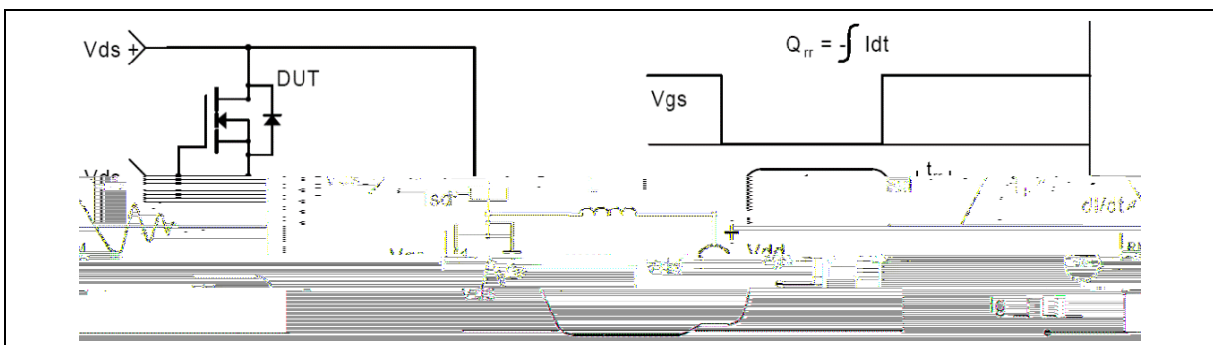
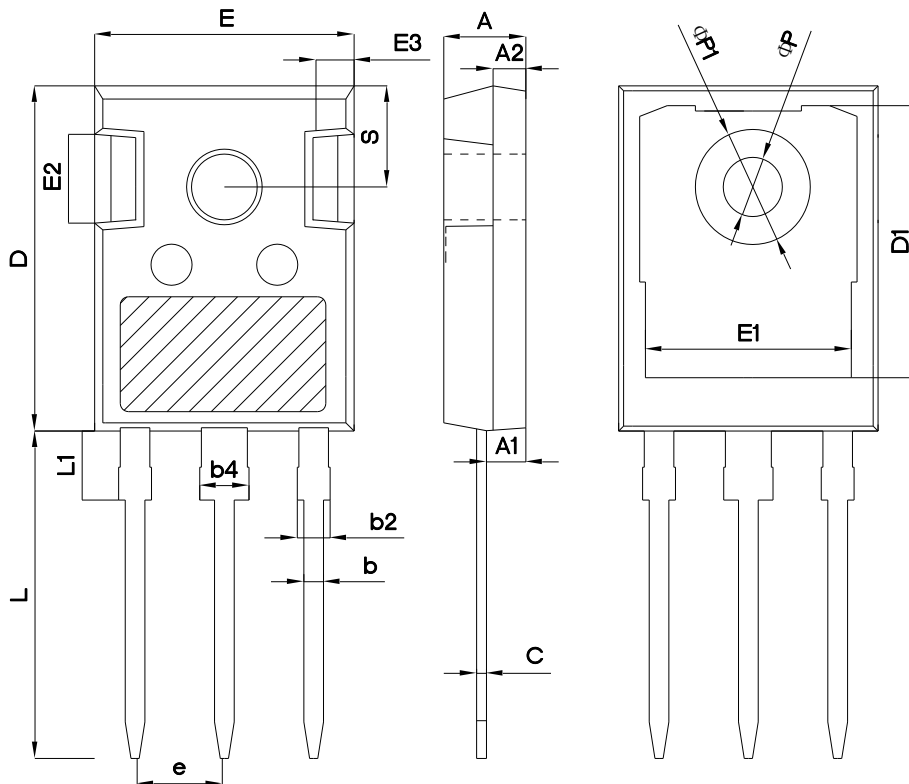


Figure 4. Diode reverse recovery test circuit & waveforms

Package Information



Symbol	mm		
	Min	Nom	Max
A	4.80	5.00	5.20
A1	2.21	2.41	2.59
A2	1.85	2.00	2.15
b	1.11	1.21	1.36
b2	1.91	2.01	2.21
b4	2.91	3.01	3.21
c	0.51	0.61	0.75
D	20.80	21.00	21.30
D1	16.25	16.55	16.85
E	15.50	15.80	16.10
E1	13.00	13.30	13.60
E2	4.80	5.00	5.20
E3	2.30	2.50	2.70
e	5.44BSC		
L	19.82	19.92	20.22
L1	-	-	4.30
	3.40	3.60	3.80
	-	-	7.30
S	6.15BSC		

Version 1: TO247-C outline dimension

Ordering Information

Package Type	Units/ Tube	Tubes/ Inner Box	Units/ Inner Box	Inner Boxes/ Carton Box	Units/ Carton Box
TO247-C	30	11	330	6	1980

Product Information

Product	Package	Pb Free	RoHS	Halogen Free
OSG60R108HSZF	TO247	yes	yes	yes