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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.

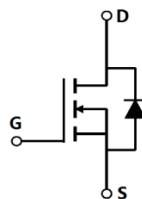
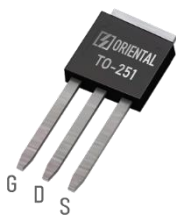
The GreenMOS[®] Generic series is optimized for extreme switching performance to minimize switching loss. It is tailored for high power density applications to meet the highest efficiency standards.



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Parameter	Value	Unit
$V_{DS, min} @ T_{j(max)}$	750	V
$I_D, pulse$	30	A
$R_{DS(ON), max} @ V_{GS}=10V$	500	m
Q_g	12.3	nC

Product Name	Package	Marking
OSG70R500AF	TO251	OSG70R500A





Electrical Characteristics Diagrams

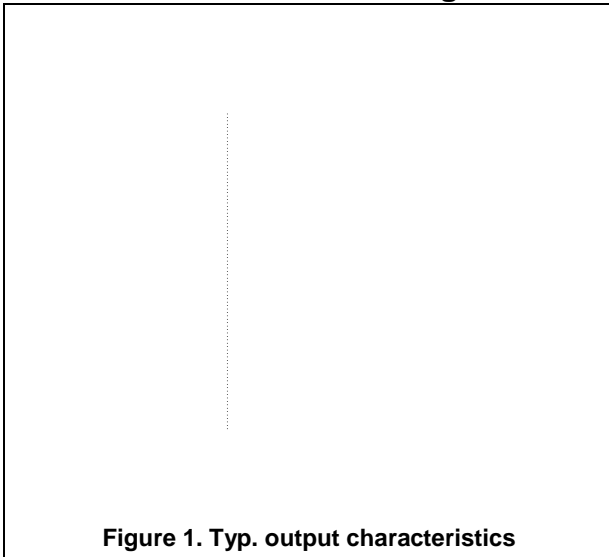


Figure 1. Typ. output characteristics

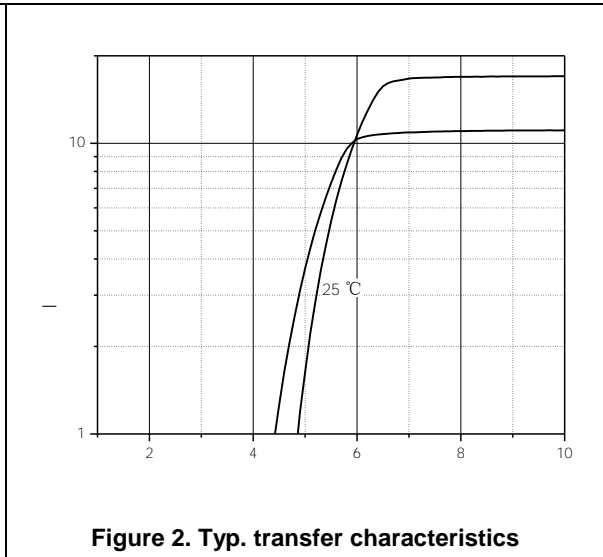


Figure 2. Typ. transfer characteristics

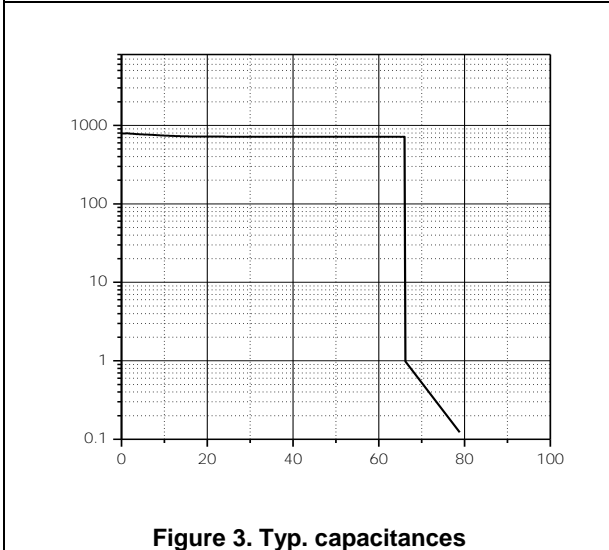


Figure 3. Typ. capacitances

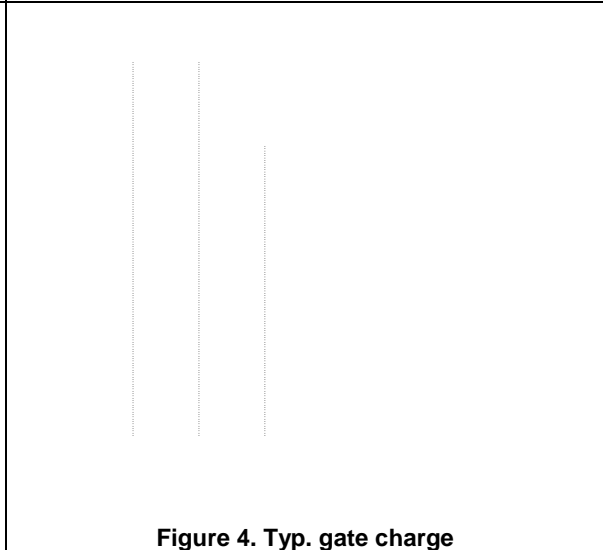


Figure 4. Typ. gate charge

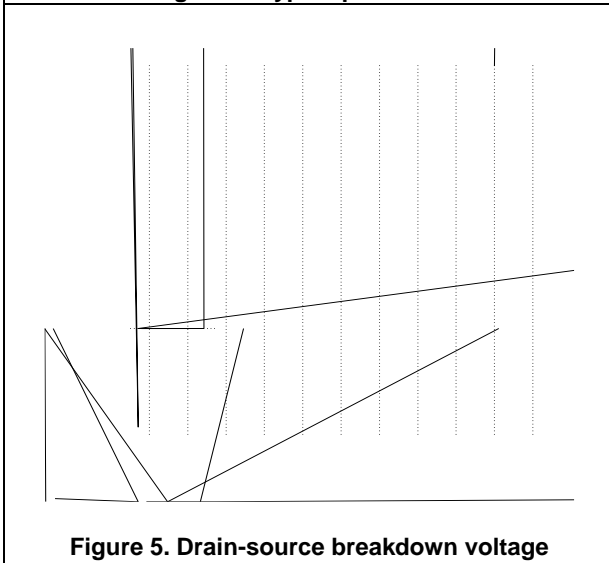


Figure 5. Drain-source breakdown voltage

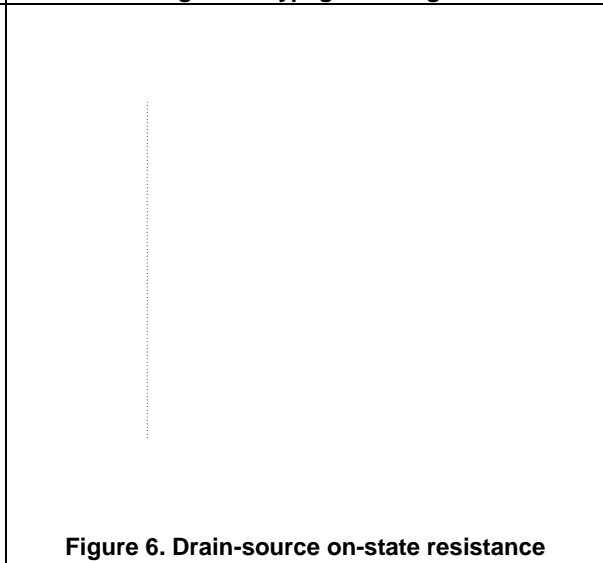


Figure 6. Drain-source on-state resistance

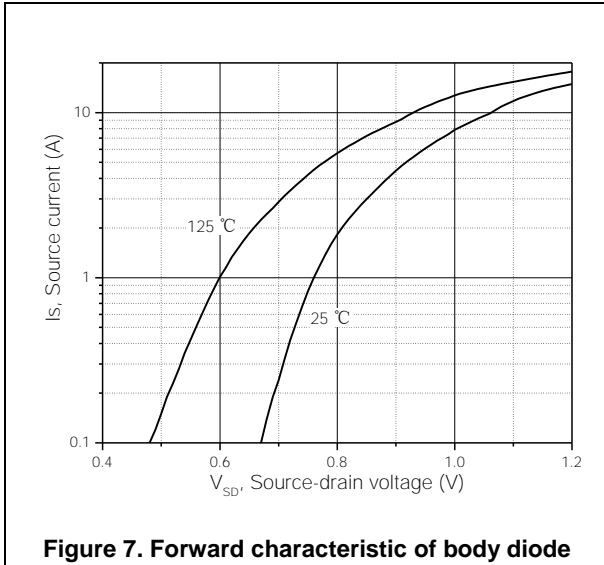


Figure 7. Forward characteristic of body diode

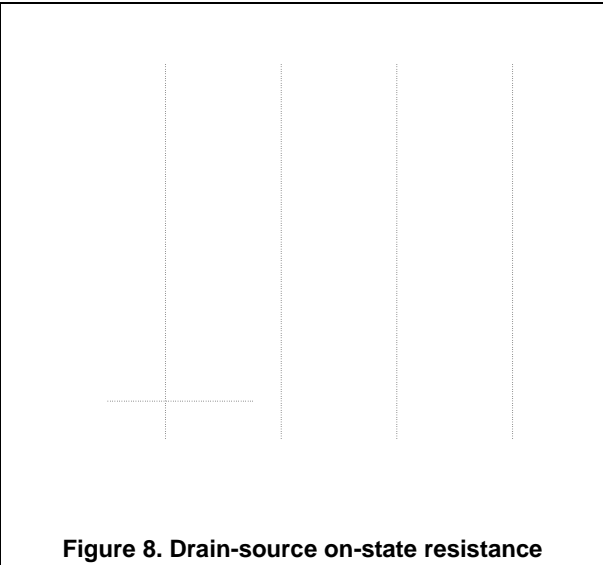


Figure 8. Drain-source on-state resistance

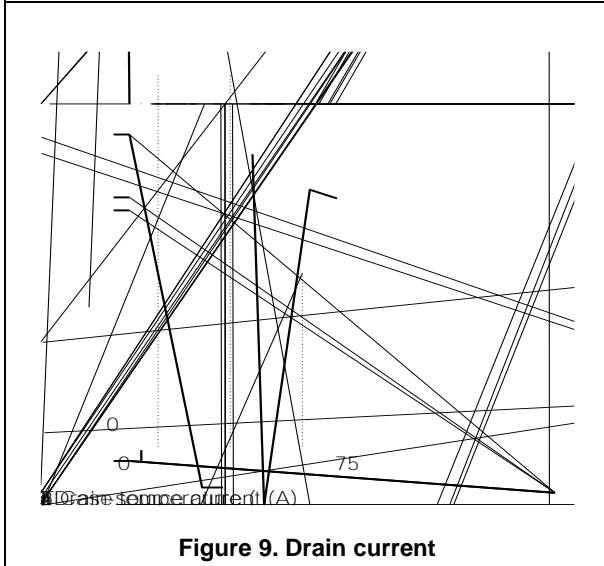


Figure 9. Drain current

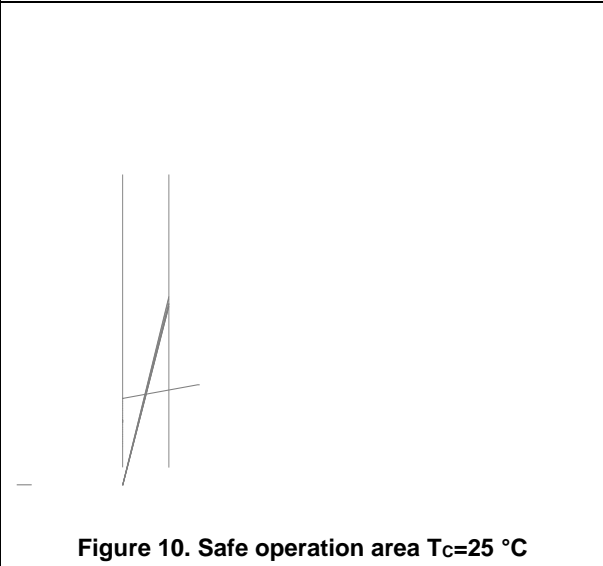
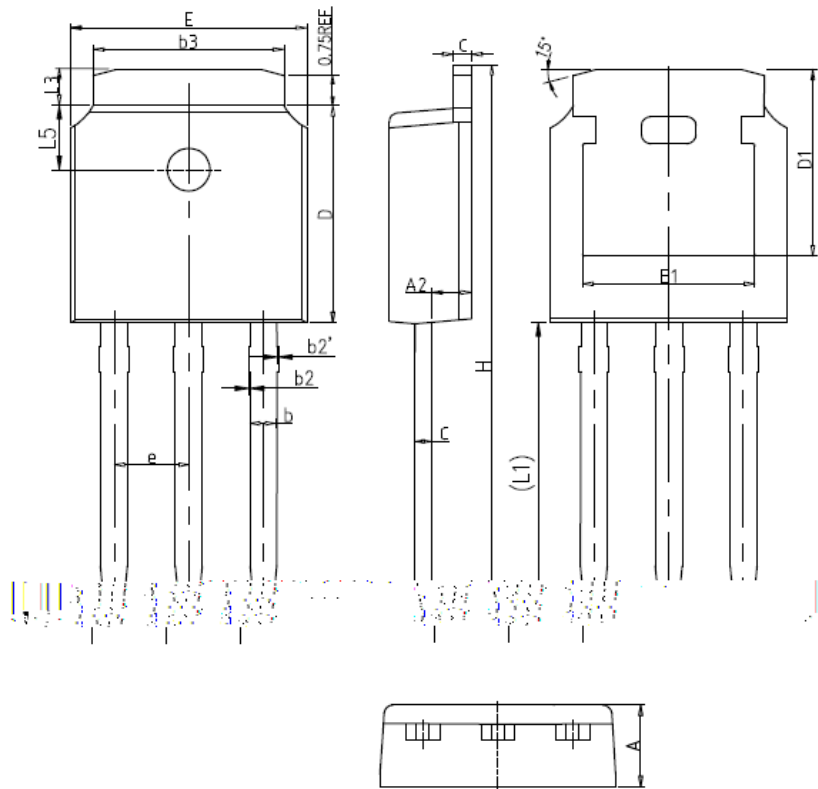


Figure 10. Safe operation area Tc=25 °C

Package Information



Symbol	mm		
	Min	Nom	Max
A	2.20	2.30	2.40
A2	0.97	1.07	1.17
b	0.68	0.78	0.90
b2	0.00	0.04	0.10
b2'	0.00	0.04	0.10
b3	5.20	5.33	5.50
c	0.43	0.53	0.63
D	5.98	6.10	6.22
D1	5.30REF		
E	6.40	6.60	6.80
E1	4.63	-	-
e	2.286BSC		
H	16.22	16.52	16.82
L1	9.15	9.40	9.65
L3	0.88	1.02	1.28
L5	1.65	1.80	1.95

Version 1: TO251-C package outline dimension

Ordering Information

Package Type	Units/Tube	Tubes/Inner Box	Units/Inner Box	Inner Boxes/ Carton Box	Units/ Carton Box
TO251-C	66	75	4950	6	29700

Product Information

Product	Package	Pb Free	RoHS	Halogen Free
OSG70R500AF	TO251	yes	yes	yes

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