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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GreenMOS®

RoHS

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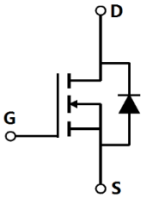
Parameter	Value	Unit
$V_{DS,\ min}$ @ $T_{j(max)}$	600	V
$I_{D,\ pulse}$	69	A
$R_{DS(ON),\ max}$ @ V_{GS}=10V	160	
Q_g	21.3	nC

Product Name	Package	Marking
OSG55R160FZF	TO220F	OSG55R160FZ



Absolute Maximum Ratings at T_j=25 unless otherwise noted

Parameter	Symbol	Value	Unit
Drain-source voltage	V_{DS}	550	V
Gate-source voltage	V_{GS}	±30	V
Continuous drain current[1], T_C=25 °C	I_D	23	A
Continuous drain current[1], T_C=100 °C		14.5	
Pulsed drain current[2], T_C=25 °C	$I_{D, pulse}$	69	A
Continuous diode forward current[1], T_C=25 °C	I_S	23	A
Diode pulsed current[2], T_C=25 °C	$I_{S, pulse}$	69	A

Dynamic Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test condition
Input capacitance	C_{iss}		1511		pF	V_{GS}=0 V, V_{DS}=50 V, Hz
Output capacitance	C_{oss}		145.8		pF	
Reverse transfer capacitance	C_{rss}					

Electrical Characteristics Diagrams

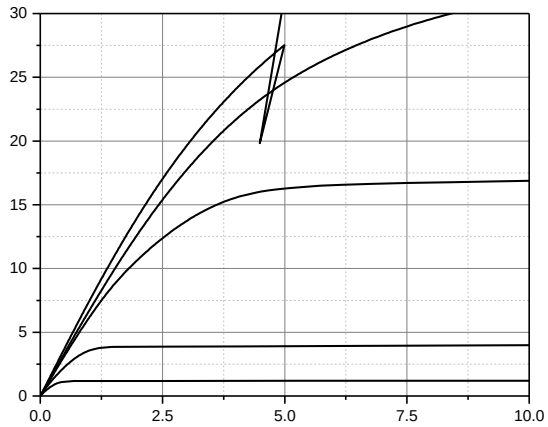


Figure 1. Typ. output characteristics

Figure 2. Typ. transfer characteristics

Figure 3. Typ. capacitances

Figure 4. Typ. gate charge

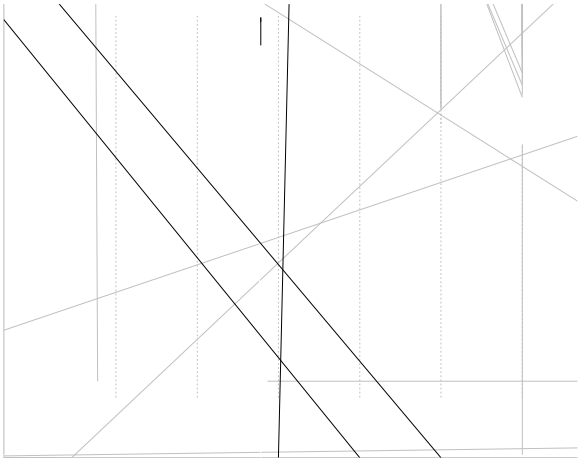


Figure 5. Drain-source breakdown voltage

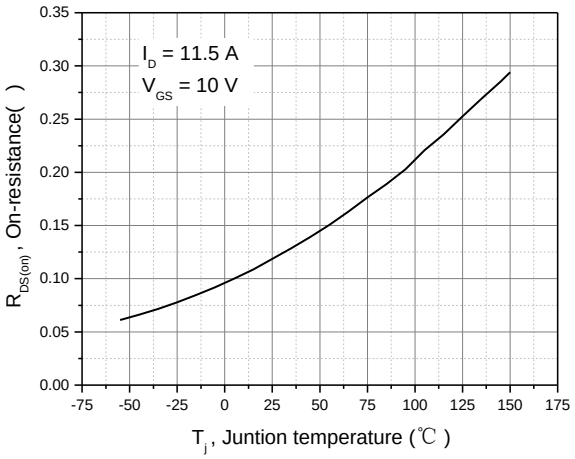


Figure 6. Drain-source on-state resistance

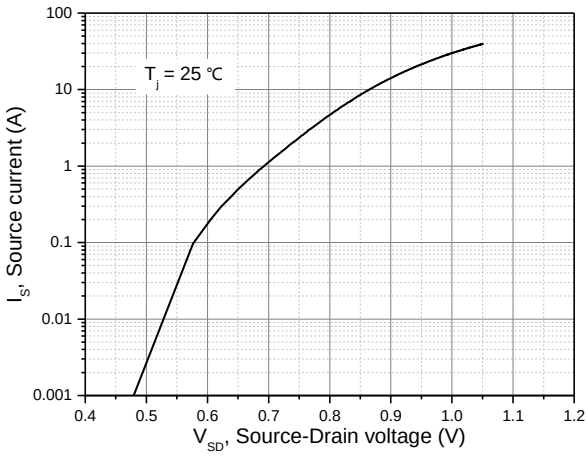


Figure 7. Forward characteristic of body diode

Figure 8. Drain-source on-state resistance

Figure 9. Drain current

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

Package Information

Symbol	mm		
	Min	Nom	Max
E	9.96	10.16	10.36
A	4.50	4.70	4.90
A1	2.34	2.54	2.74
A4	2.56	2.76	2.96
c	0.40	0.50	0.65
D	15.57	15.87	16.17
H1	6.70 REF		
e	2.54 BSC		
L	12.68	12.98	13.28
L1	2.88	3.03	3.18
	3.03	3.18	3.38
	3.15	3.45	3.65
F3	3.15	3.30	3.45
G3	1.25	1.35	1.55
b1	1.18	1.28	1.43
b2			