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.

GreenMOS®

RoHS

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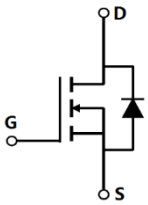
Parameter	Value	Unit
$V_{DS,\ min}$ @ $T_{j(max)}$	650	V
$I_{D,\ pulse}$	15	A
$R_{DS(ON)\ ,\ max}$ @ V_{GS}=10V	900	
Q_g	7.6	nC

Product Name	Package	Marking
OSG60R900DF	TO252	OSG60R900D



Absolute Maximum Ratings at T_j=25 unless otherwise noted

Parameter	Symbol	Value	Unit
Drain-source voltage	V_{DS}	600	V
Gate-source voltage	V_{GS}	±30	V
Continuous drain current[1], T_C=25 °C	I_D	5	A
Continuous drain current[1], T_C=100 °C		3.2	
Pulsed drain current[2], T_C=25 °C	$I_{D, pulse}$	15	A
Continuous diode forward current[1], T_C=25 °C	I_S	5	A
Diode pulsed current[2], T_C=25 °C	$I_{S, pulse}$	15	A
Power dissipation[3], T_C=25 °C	P_D	37	W
Single pulsed avalanche energy[5]	E_{AS}	130	mJ
MOSFET dv/dt ruggedness, V_{DS}	dv/dt	50	V/ns
Reverse diode dv/dt, V_{DS} SD D	dv/dt	15	V/ns
Operation and storage temperature	T_{stg}, T_j	-55 to 150	°C

Thermal Characteristics

Parameter	Symbol	Value	Unit
Thermal resistance, junction-case	R	3.4	°C/W

Thermal resistance, junction-ambient[4]

Dynamic Characteristics

Parameter	Symbol	Min.	Typ.	Max.	Unit	Test condition
Input capacitance	C_{iss}		354.2		pF	V_{GS}=0 V, V_{DS}=50 V,
Output capacitance	C_{oss}		31.4		pF	
Reverse transfer capacitance	C_{rss}		1.54			
Rise time	t_r		11.4		ns	V_{GS}=10 V, V_{DS}=400 V, R_G=25 I_D=5 A

Electrical Characteristics Diagrams

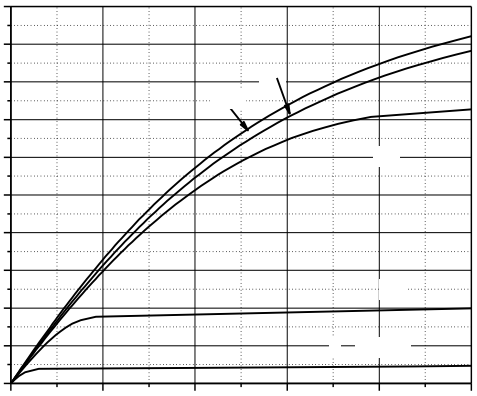


Figure 1. Typ. output characteristics

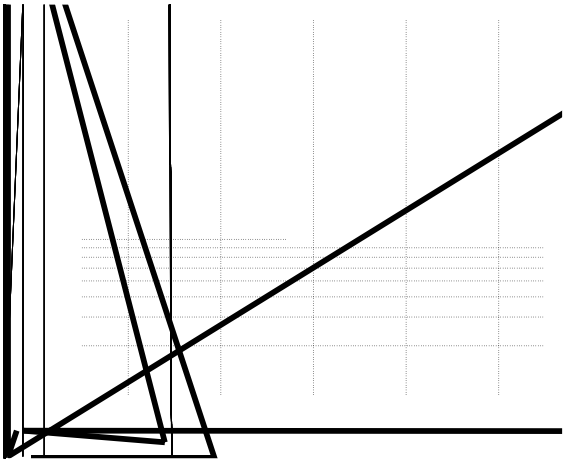


Figure 2. Typ. transfer characteristics

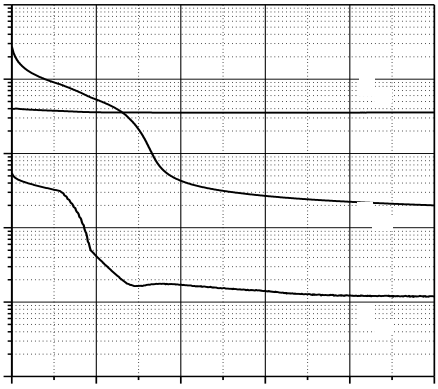


Figure 3. Typ. capacitances

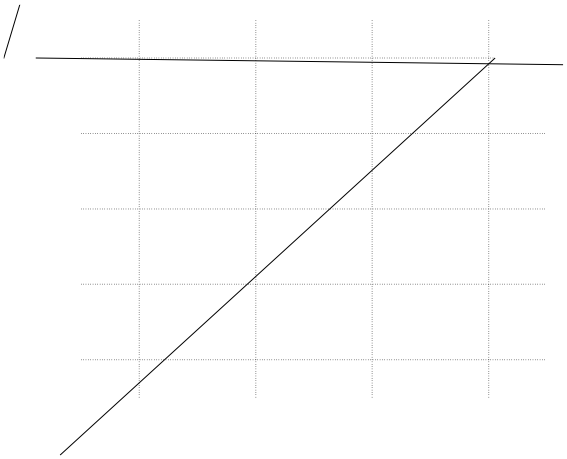


Figure 4. Typ. gate charge

Figure 5. Drain-source breakdown voltage

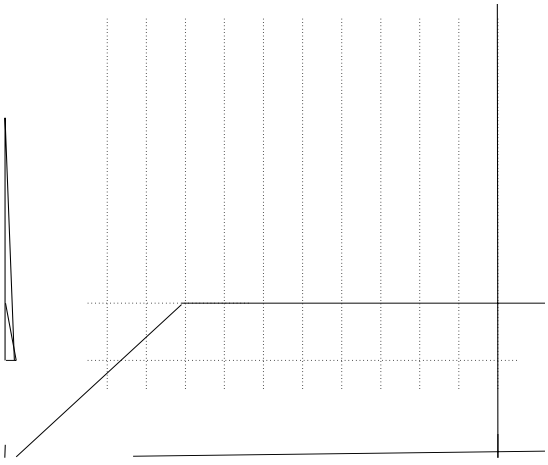


Figure 6. Drain-source on-state resistance

Package Information

Symbol	mm		
	Min	Nom	Max
A			

Ordering Information

Package Type