

# isc N-Channel MOSFET Transistor

## 2SK2184

### FEATURES

- Drain Current –I\_D= 5A@ T\_C=25 $^\circ\!\!\mathrm{C}$
- Drain Source Voltage-: V<sub>DSS</sub>=500V(Min)
- Static Drain-Source On-Resistance
- : R<sub>DS(on)</sub> = 1.5 Ω (Max)
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

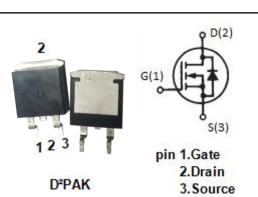
### DESCRIPTION

 motor drive, DC-DC converter, power switch and solenoid drive.

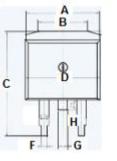
SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage	500	V
V <sub>GS</sub>	Gate-Source Voltage-Continuous	±30	V
ID	Drain Current-Continuous	5	А
I <sub>DM</sub>	Drain Current-Single Pluse	15	A
P <sub>D</sub>	Total Dissipation @TC=25°C 50		W
TJ	Max. Operating Junction Temperature	ting Junction Temperature 150	
T <sub>stg</sub>	Storage Temperature	-55~150	°C

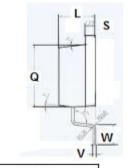
#### THERMAL CHARACTERISTICS

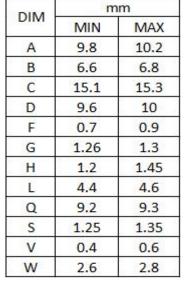
SYMBOL	PARAMETER	МАХ	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	5	°C <b>/W</b>



TO-263 package







isc website: www.iscsemi.com

### <sup>1</sup> *isc & iscsemi* is registered trademark



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### **ELECTRICAL CHARACTERISTICS**

#### $T_c=25^{\circ}C$ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 1mA	500		V
V <sub>GS</sub> (th)	Gate Threshold Voltage	V <sub>DS</sub> = 10V; I <sub>D</sub> = 1mA	2.5	3.5	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =2.5A		1.5	Ω
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±30V;V <sub>DS</sub> =0		±0.1	uA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> =500V; V <sub>GS</sub> = 0		250	uA
Vsd	Forward On-Voltage	I <sub>S</sub> =2.5A; V <sub>GS</sub> = 0		1.5	V

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