

# isc N-Channel MOSFET Transistor

## 2SK3634I

## FEATURES

- Drain Current : I\_D= 6A@ T\_C=25 $^\circ\!\mathrm{C}$
- Drain Source Voltage : V<sub>DSS</sub>= 200V(Min)
- Static Drain-Source On-Resistance
- : R<sub>DS(on)</sub> = 0.6 Ω (Max) @ V<sub>GS</sub>= 10V

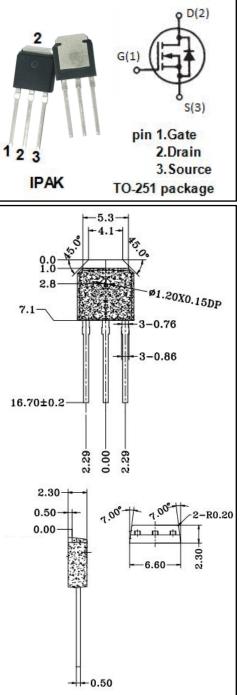
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

#### DESCRIPTION

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

ABSOLUTE MAXIMUM RATINGS(Ta=25°C)								
SYMBOL	PARAMETER	VALUE	UNIT					
V <sub>DSS</sub>	Drain-Source Voltage	200	V					
V <sub>GS</sub>	Gate-Source Voltage-Continuous	±30	V					
ID	Drain Current-Continuous	6	А					
I <sub>DM</sub>	Drain Current-Single Pluse	18	Α					
PD	Total Dissipation @Tc=25℃	20	W					
TJ	Max. Operating Junction Temperature	-55~150	°C					
T <sub>stg</sub>	Storage Temperature	-55~150	°C					

THERMAL CHARACTERISTICS				
SYMBOL	PARAMETER	MAX	UNIT	
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	6.25	℃ <b>/W</b>	



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### **ELECTRICAL CHARACTERISTICS**

#### T<sub>c</sub>=25℃ 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	200		V
$V_{GS(th)}$	Gate Threshold Voltage	V <sub>DS</sub> = 10V; I <sub>D</sub> = 1mA	2.5	4.5	V
R <sub>DS</sub> (on)	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 3A		0.6	Ω
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±30V;V <sub>DS</sub> =0		±10	uA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 200V; V <sub>GS</sub> = 0		10	uA
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 16A; V <sub>GS</sub> = 0		1	V

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