

# isc N-Channel MOSFET Transistor

## 2SK3634D

### FEATURES

- Drain Current : I\_D= 6A@ T\_C=25 $^\circ\!\!\mathbb{C}$
- 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

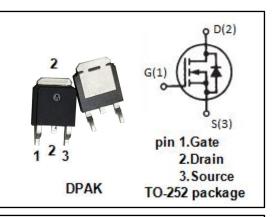
 motor drive, DC-DC converter, power switch and solenoid drive.

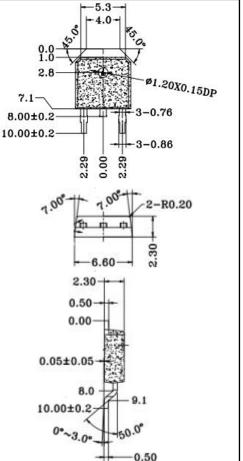
ABSOLUTE MAXIMUM RATINGS(Ta=23 C)						
SYMBOL	PARAMETER VALUE		UNIT			
V <sub>DSS</sub>	Drain-Source Voltage	rain-Source Voltage 200				
V <sub>GS</sub>	Gate-Source Voltage-Continuous ±30		V			
ID	Drain Current-Continuous 6		A			
I <sub>DM</sub>	Drain Current-Single Pluse 18		A			
PD	Total Dissipation @Tc=25°C 20		W			
TJ	Max. Operating Junction Temperature	ature -55~150				
T <sub>stg</sub>	Storage Temperature -55~150		°C			

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	6.25	°C <b>/W</b>





### isc website: <u>www.iscsemi.com</u>



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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	200		V
V <sub>GS</sub> (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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