

### INCHANGE SEMICONDUCTOR

# isc N-Channel MOSFET Transistor

## 2SK3468

#### FEATURES

- Drain Current : I\_D= 12A@ 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> = 0.52 Ω (Max) @ V<sub>GS</sub>= 10V
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

#### DESCRIPTION

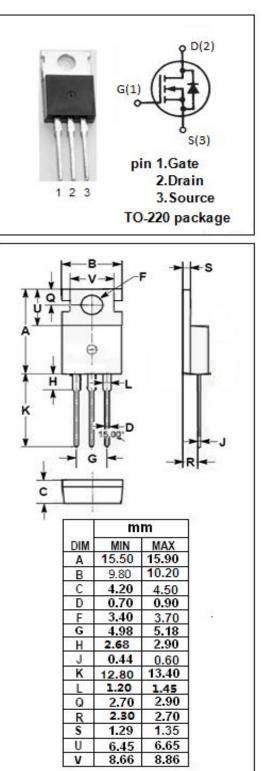
 motor drive, DC-DC converter, power switch and solenoid drive.

ABSOLUTE WANIWOW RATINGS (Ta=25 C)					
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 12		A		
I <sub>DM</sub>	Drain Current-Single Pluse 48		A		
P <sub>D</sub>	Total Dissipation @T <sub>c</sub> =25°C 95		W		
TJ	Max. Operating Junction Temperature	-55~150	°C		
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	1.32	°C/W	



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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> = 0.25mA	500		V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = 10V; I <sub>D</sub> = 0.25mA	3	5	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	VGS= 10V; ID= 6A		0.52	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		25	uA
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 12A; V <sub>GS</sub> = 0		1.5	V

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