

# isc N-Channel MOSFET Transistor

## 2SK4088LS

### **FEATURES**

- Drain Current : ID= 11A@ TC=25  $^{\circ}\mathrm{C}$
- Drain Source Voltage
  - : V<sub>DSS</sub>= 650V(Min)
- Static Drain-Source On-Resistance
  - :  $R_{DS(on)} = 0.85 \Omega (Max) @ V_{GS} = 10V$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### **DESCRIPTION**

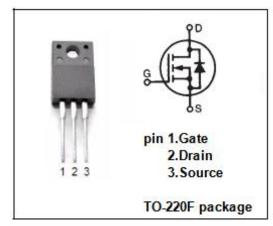
 motor drive, DC-DC converter, power switch and solenoid drive.

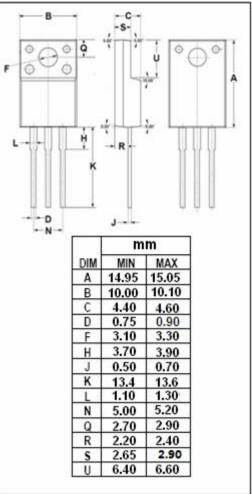
## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage	650	V
V <sub>GS</sub>	Gate-Source Voltage-Continuous	±30	V
I <sub>D</sub>	Drain Current-Continuous	11	Α
I <sub>DM</sub>	Drain Current-Single Pluse	40	А
P <sub>D</sub>	Total Dissipation @Tc=25℃	37	W
TJ	Max. Operating Junction Temperature -55~150		$^{\circ}$
T <sub>stg</sub>	Storage Temperature -55~150		$^{\circ}$

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	3.378	°C/W







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### **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 10mA	650		V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = 10V; I <sub>D</sub> = 1.0mA	3.0	5.0	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> = 5.5A		0.85	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> = 520V; V <sub>GS</sub> = 0		100	uA
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 11A; V <sub>GS</sub> = 0		1.2	V

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