

# isc N-Channel MOSFET Transistor

2SK430S

### **FEATURES**

- Drain Current : ID= 3.0A@ TC=25  $^{\circ}\mathrm{C}$
- Drain Source Voltage
  - : V<sub>DSS</sub>= 150V(Min)
- Static Drain-Source On-Resistance
  - :  $R_{DS(on)} = 1.0 \Omega (Max) @ V_{GS} = 15V$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## **DESCRIPTION**

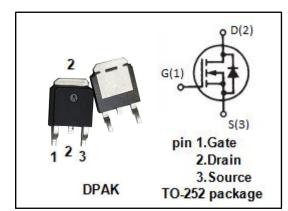
 motor drive, DC-DC converter, power switch and solenoid drive.

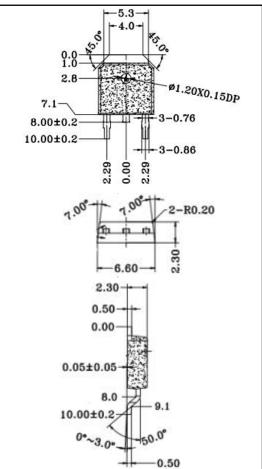
# ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage 150		V
V <sub>GS</sub>	Gate-Source Voltage-Continuous ±20		V
I <sub>D</sub>	Drain Current-Continuous 3.0		А
I <sub>DM</sub>	Drain Current-Single Pluse 6.0		А
$P_D$	Total Dissipation @Tc=25°C 20		W
TJ	Max. Operating Junction Temperature	ature -55~150	
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	6.25	°C/W







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### **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=25℃ 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	150		V
$V_{GS(th)}$	Gate Threshold Voltage	V <sub>DS</sub> = 10V; I <sub>D</sub> = 0.25mA	1.0	4.0	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 15V; I <sub>D</sub> = 2.0A		1.0	Ω
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> = 0		±1.0	uA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 120V; V <sub>GS</sub> = 0		1.0	mA
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> = 2.0A; V <sub>GS</sub> = 0	-	1.5	V

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