

# isc N-Channel MOSFET Transistor

# 2SK2503

## **FEATURES**

- Drain Current -I<sub>D</sub>=5A@ T<sub>C</sub>=25 °C
- Drain Source Voltage-
  - : V<sub>DSS</sub>=60V(Min)
- Static Drain-Source On-Resistance
  - :  $R_{DS(on)} = 0.135 \Omega (Max)$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## **DESCRIPTION**

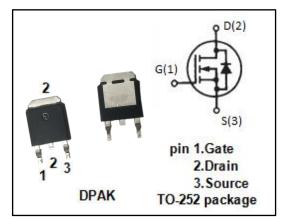
 motor drive, DC-DC converter, power switch and solenoid drive.

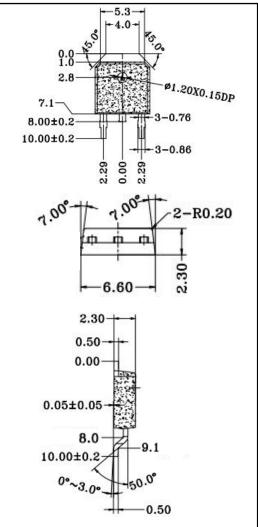
## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage	60	V
V <sub>GS</sub>	Gate-Source Voltage-Continuous ±		V
I <sub>D</sub>	Drain Current-Continuous	5	А
I <sub>DM</sub>	Drain Current-Single Pluse 20		А
$P_D$	Total Dissipation @TC=25℃ 20		W
TJ	Max. Operating Junction Temperature 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	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> = 1mA	60		V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> = 10V; I <sub>D</sub> =1mA	1	2.5	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =2.5A		0.135	Ω
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> = 0		±0.1	uA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> =60V; V <sub>GS</sub> = 0	1	10	uA

### **NOTICE:**

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