

## isc N-Channel MOSFET Transistor

## 2SK559

#### **DESCRIPTION**

- Drain Current –I<sub>D</sub>=15A@ T<sub>C</sub>=25°C
- · Drain Source Voltage-
  - : V<sub>DSS</sub>=450V(Min)
- · Fast Switching Speed
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

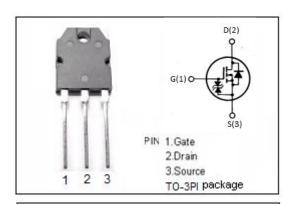


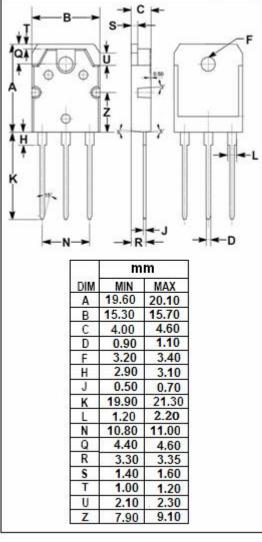
#### **APPLICATIONS**

 Designed especially for high voltage, high speed applications, such as off-line switching power supplies, UPS,AC and DC motor controls, relay and solenoid drivers.



SYMBOL	ARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage (V <sub>GS</sub> =0)	450	٧
V <sub>G</sub> s	Gate-Source Voltage	±20	٧
lo	Drain Current-continuous@ TC=25℃	15	Α
P <sub>tot</sub>	Total Dissipation@TC=25℃	100	W
Tj	Max. Operating Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	$^{\circ}$







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### • ELECTRICAL CHARACTERISTICS (Tc=25°C)

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0; I <sub>D</sub> = 10mA	450			V
$V_{GS(TH)}$	Gate Threshold Voltage	V <sub>DS</sub> = 10V; I <sub>D</sub> = 1mA	2.0		4.0	V
R <sub>DS(ON)</sub>	Drain-Source On-stage Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =8A		0.25	0.36	Ω
V <sub>SD</sub>	Diode Forward Voltage	I <sub>F</sub> = 15A; V <sub>GS</sub> =0		1.2		V
lgss	Gate Source Leakage Current	V <sub>GS</sub> = ±16V; V <sub>DS</sub> = 0			±10	uA
IDSS	Zero Gate Voltage Drain Current	V <sub>DS</sub> =360V; V <sub>GS</sub> = 0			250	uA



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