

## INCHANGE SEMICONDUCTOR

# isc N-Channel MOSFET Transistor

## 2SK1317

## • FEATURES

- Drain Source Voltage-
  - : V<sub>DSS</sub>= 1500V(Min)
- Static Drain-Source On-Resistance : R<sub>DS(on)</sub> = 12 Ω (Max)
- Suitable for switching regulator, DC-DC converter and motor driver
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

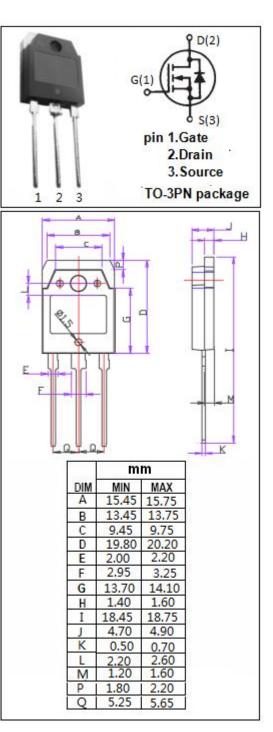
High speed power switching

### • ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	PARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage	1500	V
V <sub>GS</sub>	Gate-Source Voltage-Continuous	±20	V
I <sub>D</sub>	Drain Current-Continuous	2.5	A
IDM	Drain Current-Single Plused	7	А
P <sub>D</sub>	Total Dissipation @Tc=25°C	100	W
Tj	Max. Operating Junction Temperature 150		°C
T <sub>stg</sub>	Storage Temperature -55		°C

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
Rth j-c	Thermal Resistance, Junction to Case	1.25	°C/W



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### • ELECTRICAL CHARACTERISTICS

 $T_c=25^{\circ}C$  unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYPE	МАХ	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> =250uA	1500			V
V <sub>GS</sub> (th)	Gate Threshold Voltage	V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> = 250uA	3		5	V
R <sub>DS(on)</sub>	Drain-Source On-Resistance	V <sub>GS</sub> = 15V; I <sub>D</sub> = 2A			12	Ω
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±20V;V <sub>DS</sub> = 0			±1	uA
IDSS	Zero Gate Voltage Drain Current	V <sub>DS</sub> = 1500V; V <sub>GS</sub> = 0			1	μA
Vsd	Diode Forward On-voltage	I <sub>F</sub> = 2A ;V <sub>GS</sub> = 0			1.4	V

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