

## **INCHANGE SEMICONDUCTOR**

## isc N-Channel MOSFET Transistor

## 2SK387

## DESCRIPTION

- Drain Current –I\_D=12A@ T\_C=25 $^\circ\!\!\mathrm{C}$
- Drain Source Voltage-: V<sub>DSS</sub>= 150V(Min)
- Fast Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

• High speed applications.

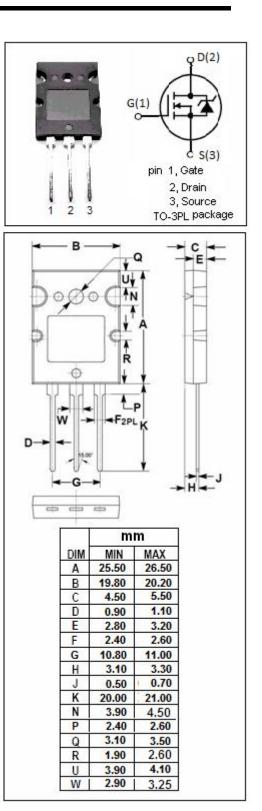
such as off-line switching power supplies , UPS,AC and DC motor controls,relay and solenoid drivers.

### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

SYMBOL	ARAMETER	VALUE	UNIT
V <sub>DSS</sub>	Drain-Source Voltage (V <sub>GS</sub> =0)	150	V
$V_{GS}$	Gate-Source Voltage	V	
ID	Drain Current-continuous@ TC=25℃	12	A
P <sub>tot</sub>	Total Dissipation@TC=25℃ 150		W
Tj	Max. Operating Junction Temperature	150	°C
T <sub>stg</sub>	Storage Temperature Range	-55~150	°C

#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	1.67	°C/W



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	ELECTRICAL CHARACTERISTICS (10-23 C)								
SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	МАХ	UNIT			
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> =0; I <sub>D</sub> = 10mA	150			V			
V <sub>GS(TH)</sub>	Gate Threshold Voltage	V <sub>DS</sub> =10V; I <sub>D</sub> = 1mA	1.5		3.5	V			
R <sub>DS(ON)</sub>	Drain-Source On-stage Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =10A		0.12	0.18	Ω			
I <sub>GSS</sub>	Gate Source Leakage Current	V <sub>GS</sub> = ±20V; V <sub>DS</sub> = 0			±100	nA			
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> =150V; V <sub>GS</sub> = 0			1	mA			

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

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