

## **INCHANGE SEMICONDUCTOR**

# isc N-Channel MOSFET Transistor

# 2SK2601

pin 1, Gate

G

R

mm

15.50 15.70

MAX 19.60 20.30

4.90

1.10

.10

3.60

3.20

40

0.605

2 20

5.10

3.45

2.100

6.20 9.90 10.10

10 91

MIN

4.70

0.90

3.40

2.90

.20

595

10.89

4.90

3.35

5.90

1.995

19.80 20.70 1.90

.90

DIM

А

В

С

D

E

F

G

Н

J

Κ

Ν

0

R

s

U

Y

С S 2, Drain

3. Source TO-3PN package

## **FEATURES**

- Drain Current –I<sub>D</sub>=10A@ T<sub>C</sub>=25℃
- · Drain Source Voltage-: V<sub>DSS</sub>=500V(Min)
- Static Drain-Source On-Resistance
- :  $R_{DS(on)} = 1 \Omega (Max)$
- 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	500	V			
V <sub>GS</sub>	Gate-Source Voltage-Continuous	±30	V			
ID	Drain Current-Continuous	10	А			
I <sub>DM</sub>	Drain Current-Single Pluse	40	А			
PD	Total Dissipation @TC=25℃	125	W			
TJ	Max. Operating Junction Temperature	150	°C			
T <sub>stg</sub>	Storage Temperature	-55~150	°C			
			•			

PARAMETER

Thermal Resistance, Junction to Case

## ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

isc website: www.iscsemi.com

THERMAL CHARACTERISTICS

SYMBOL

Rth j-c

1 isc & iscsemi is registered trademark

2

B

3

1

F

MAX

1

UNIT

°C/W



# isc N-Channel MOSFET Transistor

## 2SK2601

### **ELECTRICAL CHARACTERISTICS**

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

SYMBOL	PARAMETER	CONDITIONS	MIN	МАХ	UNIT
V <sub>(BR)DSS</sub>	Drain-Source Breakdown Voltage	V <sub>GS</sub> = 0; I <sub>D</sub> = 1mA	500		V
V <sub>GS(th)</sub>	Gate Threshold Voltage	V <sub>DS</sub> =10V; I <sub>D</sub> =1mA	2	4	V
R <sub>DS</sub> (on)	Drain-Source On-Resistance	V <sub>GS</sub> = 10V; I <sub>D</sub> =5A		1	Ω
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±25V;V <sub>DS</sub> = 0		±10	uA
I <sub>DSS</sub>	Zero Gate Voltage Drain Current	V <sub>DS</sub> =500V; V <sub>GS</sub> = 0		100	uA
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> =10A; V <sub>GS</sub> = 0V		1.7	V

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