

# isc N-Channel MOSFET Transistor

## 2SK3272L

### **FEATURES**

- Drain Current : I<sub>D</sub>= 80A@ T<sub>C</sub>=25℃
- Drain Source Voltage : V<sub>DSS</sub>= 60V(Min)
- Static Drain-Source On-Resistance
- : R<sub>DS(on)</sub> = 6.5m Ω (Max) @VGS= 40V
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### DESCRIPTION

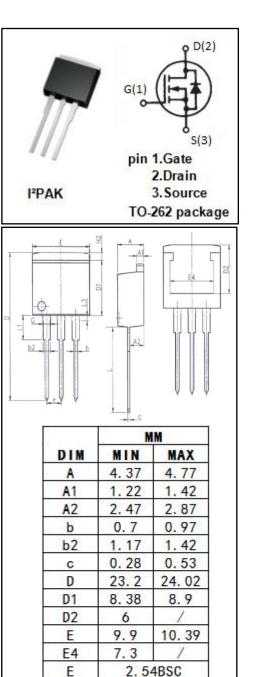
· motor drive, DC-DC converter, power switch and solenoid drive.

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	±30	V				
ID	Drain Current-Continuous	80	A				
I <sub>DM</sub>	Drain Current-Single Pluse	320	A				
PD	Total Dissipation @Tc=25℃	135	w				
TJ	lax. Operating Junction Temperature -55~150		°C				
T <sub>stg</sub>	Storage Temperature -55~150		°C				

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#### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	МАХ	UNIT
R <sub>th j-c</sub>	Thermal Resistance, Junction to Case	0.93	°C <b>/W</b>



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G

H2

L

L1 L3 1.25

13.34

3.3

0.95

1.5

1.31

14.1

4.06

1.15



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### **ELECTRICAL CHARACTERISTICS**

#### T<sub>c</sub>=25℃ 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	60		V
V <sub>GS</sub> (th)	Gate Threshold Voltage	V <sub>DS</sub> = 10V; I <sub>D</sub> = 1mA	2.5	2.5	V
R <sub>DS</sub> (on)	Drain-Source On-Resistance	V <sub>GS</sub> = 40V; I <sub>D</sub> = 40A		6.5	mΩ
I <sub>GSS</sub>	Gate-Body Leakage Current	V <sub>GS</sub> = ±30V;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		0.1	mA
V <sub>SD</sub>	Forward On-Voltage	I <sub>S</sub> =80A; V <sub>GS</sub> = 0		1.5	V

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