

isc N-Channel MOSFET Transistor

2SK2072L

FEATURES

- Drain Current -I_D= 6A@ T_C=25 °C
- Drain Source Voltage-
 - : V_{DSS}=800V(Min)
- Static Drain-Source On-Resistance
 - : $R_{DS(on)} = 2.1 \Omega (Max)$
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

DESCRIPTION

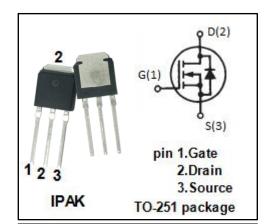
 motor drive, DC-DC converter, power switch and solenoid drive.

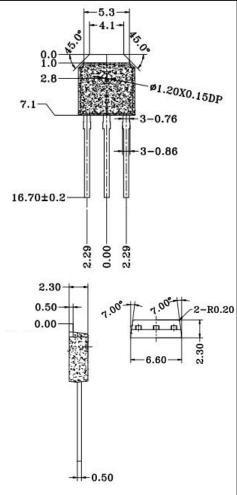
ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| SYMBOL | PARAMETER | VALUE | UNIT |
|------------------|---|-------|------------|
| V _{DSS} | Drain-Source Voltage | 800 | V |
| V _{GS} | Gate-Source Voltage-Continuous | ±30 | V |
| I _D | Drain Current-Continuous | 6 | А |
| I _{DM} | Drain Current-Single Pluse | 24 | А |
| P _D | Total Dissipation @Tc=25℃ | 80 | W |
| TJ | Max. Operating Junction Temperature 150 | | $^{\circ}$ |
| T _{stg} | Storage Temperature -55~150 | | $^{\circ}$ |

THERMAL CHARACTERISTICS

| SYMBOL | PARAMETER | MAX | UNIT | | | | |
|---------------------|--------------------------------------|------|------|--|--|--|--|
| R _{th j-c} | Thermal Resistance, Junction to Case | 1.56 | °C/W | | | | |





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ELECTRICAL CHARACTERISTICS

T_C=25℃ unless otherwise specified

| SYMBOL | PARAMETER | CONDITIONS | MIN | MAX | UNIT |
|----------------------|---------------------------------|---|-----|------|------|
| V _{(BR)DSS} | Drain-Source Breakdown Voltage | V _{GS} = 0; I _D = 1mA | 800 | | V |
| V _{GS(th)} | Gate Threshold Voltage | V _{DS} = 10V; I _D = 1mA | 2.5 | 3.5 | V |
| R _{DS(on)} | Drain-Source On-Resistance | V _{GS} = 10V; I _D = 3A | | 2.1 | Ω |
| I _{GSS} | Gate-Body Leakage Current | V _{GS} = ±30V;V _{DS} = 0 | | ±0.1 | uA |
| I _{DSS} | Zero Gate Voltage Drain Current | V _{DS} =800V; V _{GS} = 0 | | 500 | uA |
| V _{SD} | Forward On-Voltage | I _S = 6A; V _{GS} = 0 | | 1.6 | V |

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