

**isc N-Channel MOSFET Transistor**

**2SK529**

**DESCRIPTION**

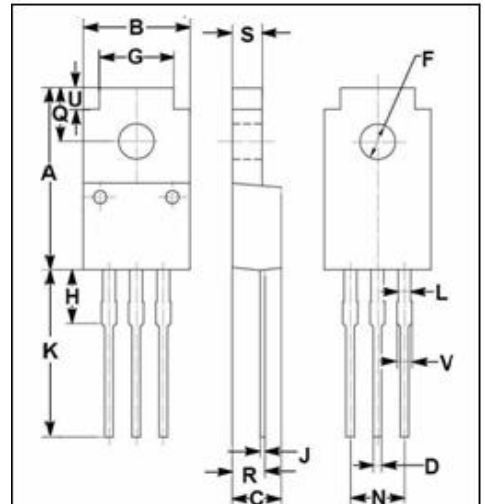
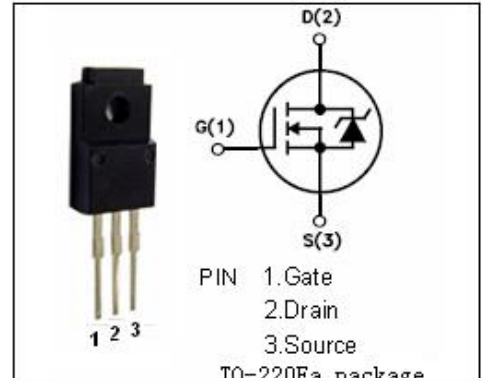
- Drain Current  $-I_D=2A @ T_C=25^\circ C$
- Drain Source Voltage-  
:  $V_{DSS}=450V(\text{Min})$

**APPLICATIONS**

- Designed especially for high voltage,high speed applications, such as off-line switching power supplies , UPS,AC and DC motor controls,relay and solenoid drivers.

**ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ C$ )**

| SYMBOL    | ARAMETER                                  | VALUE    | UNIT       |
|-----------|---|----------|------------|
| $V_{DSS}$ | Drain-Source Voltage ( $V_{GS}=0$ )       | 450      | V          |
| $V_{GS}$  | Gate-Source Voltage                       | $\pm 20$ | V          |
| $I_D$     | Drain Current-continuous@ $TC=25^\circ C$ | 2        | A          |
| $P_{tot}$ | Total Dissipation@ $TC=25^\circ C$        | 30       | W          |
| $T_j$     | Max. Operating Junction Temperature       | 150      | $^\circ C$ |
| $T_{stg}$ | Storage Temperature Range                 | -55~150  | $^\circ C$ |



| DIM | mm    |       |
|-----|-------|-------|
|     | MIN   | MAX   |
| A   | 16.85 | 17.15 |
| B   | 9.90  | 10.10 |
| C   | 4.35  | 4.65  |
| D   | 0.75  | 0.80  |
| F   | 3.20  | 3.40  |
| G   | 6.90  | 7.10  |
| H   | 5.15  | 5.45  |
| J   | 0.45  | 0.75  |
| K   | 13.35 | 13.65 |
| L   | 1.10  | 1.30  |
| N   | 4.98  | 5.18  |
| Q   | 4.85  | 5.15  |
| R   | 2.95  | 3.25  |
| S   | 2.70  | 2.90  |
| U   | 1.75  | 2.05  |
| V   | 1.30  | 1.50  |

**isc N-Channel Mosfet Transistor****2SK529****• ELECTRICAL CHARACTERISTICS (T<sub>c</sub>=25°C)**

| SYMBOL               | PARAMETER                        | CONDITIONS                                  | MIN | TYP. | MAX | UNIT |
|----------------------|----------------------------------|---|-----|------|-----|------|
| V <sub>(BR)DSS</sub> | Drain-Source Breakdown Voltage   | V <sub>GS</sub> =0; I <sub>D</sub> = 10mA   | 450 |      |     | 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> =1A   |     |      | 2.6 | Ω    |
| V <sub>DS(ON)</sub>  | Drain-Source Saturation Voltage  | I <sub>F</sub> = 1A; V <sub>GS</sub> =10V   |     | 10   | 13  | V    |
| I <sub>GSS</sub>     | Gate Source Leakage Current      | V <sub>GS</sub> = ±20V; V <sub>DS</sub> = 0 |     |      | ±1  | uA   |
| I <sub>DSS</sub>     | Zero Gate Voltage Drain Current  | V <sub>DS</sub> =450V; V <sub>GS</sub> = 0  |     |      | 1   | mA   |