

## isc N-Channel MOSFET Transistor

2SK767

## DESCRIPTION

- Drain Current  $-I_D=5A@ T_C=25^\circ C$
- Drain Source Voltage-  
:  $V_{DSS}= 500V(\text{Min})$
- Fast Switching Speed
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

## APPLICATIONS

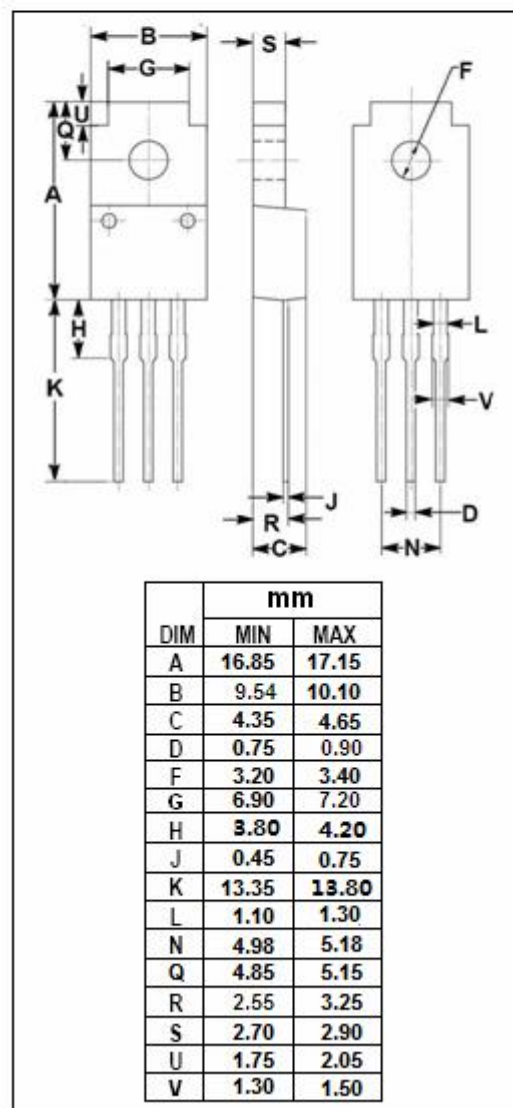
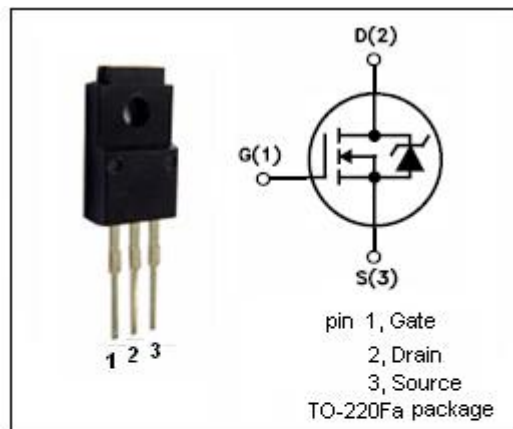
- Designed for high voltage, high speed power switching applications such as switching regulators, converters, solenoid and relay drivers.

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

| SYMBOL    | PARAMETER                                  | VALUE    | UNIT       |
|-----------|--|----------|------------|
| $V_{DSS}$ | Drain-Source Voltage ( $V_{GS}=0$ )        | 500      | V          |
| $V_{GS}$  | Gate-Source Voltage                        | $\pm 20$ | V          |
| $I_D$     | Drain Current-continuous@ $T_C=25^\circ C$ | 5        | A          |
| $P_{tot}$ | Total Dissipation@ $T_C=25^\circ C$        | 50       | W          |
| $T_j$     | Max. Operating Junction Temperature        | 150      | $^\circ C$ |
| $T_{stg}$ | Storage Temperature Range                  | -55~150  | $^\circ C$ |

## THERMAL CHARACTERISTICS

| SYMBOL        | PARAMETER                               | MAX  | UNIT         |
|---------------|---|------|--------------|
| $R_{th\ j-c}$ | Thermal Resistance, Junction to Case    | 1.0  | $^\circ C/W$ |
| $R_{th\ j-a}$ | Thermal Resistance, Junction to Ambient | 62.5 | $^\circ C/W$ |



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• 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   | 500 |     |     | V    |
| V <sub>GS(th)</sub>  | Gate Threshold Voltage           | V <sub>DS</sub> =25 V; I <sub>D</sub> =1mA  | 1.0 |     | 5.0 | V    |
| R <sub>DS(on)</sub>  | Drain-Source On-stage Resistance | V <sub>GS</sub> =10V; I <sub>D</sub> = 3A   |     | 1.2 | 1.8 | Ω    |
| 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> =400V; V <sub>GS</sub> = 0  |     |     | 100 | uA   |

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