

# isc N-Channel MOSFET Transistor

## 2SK2608

#### • FEATURES

- Static drain-source on-resistance:
  R<sub>DS</sub>(on) ≤3.78Ω(TYP)
- Enhancement mode
- · Fast Switching Speed
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### DESCRITION

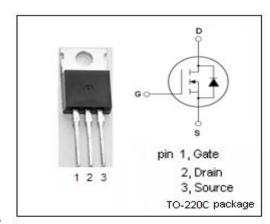
· Efficient and reliable device for use in a wide variety of applications

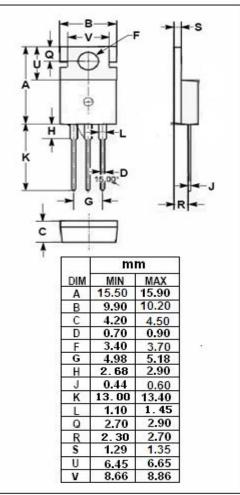
## • ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| SYMBOL            | PARAMETER                               | VALUE   | UNIT                 |
|-------------------|---|---------|----------------------|
| $V_{	extsf{DSS}}$ | Drain-Source Voltage                    | 900     | V                    |
| V <sub>GS</sub>   | Gate-Source Voltage                     | ±30     | V                    |
| I <sub>D</sub>    | Drain Current-Continuous                | 3       | А                    |
| I <sub>DM</sub>   | Drain Current-Single Pulsed             | 9       | А                    |
| P <sub>D</sub>    | Total Dissipation @T <sub>C</sub> =25°C |         | W                    |
| Tj                | Max. Operating Junction Temperature 150 |         | $^{\circ}\mathbb{C}$ |
| T <sub>stg</sub>  | Storage Temperature                     | -55~150 | $^{\circ}$           |

### • THERMAL CHARACTERISTICS

| SYMBOL    | PARAMETER                                       | MAX  | UNIT |
|-----------|---|------|------|
| Rth(ch-c) | Channel-to-case thermal resistance              | 1.25 | °C/W |
| Rth(ch-a) | Rth(ch-a) Channel-to-ambient thermal resistance |      | °C/W |







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### **ELECTRICAL CHARACTERISTICS**

T<sub>C</sub>=25℃ unless otherwise specified

| SYMBOL              | PARAMETER                      | CONDITIONS                                  | MIN | ТҮР | МАХ | UNIT |
|---------------------|--------------------------------|---|-----|-----|-----|------|
| BV <sub>DSS</sub>   | Drain-Source Breakdown Voltage | V <sub>GS</sub> =0V; ID =10mA               | 900 |     |     | V    |
| V <sub>GS(th)</sub> | Gate Threshold Voltage         | V <sub>DS</sub> =V <sub>GS</sub> ; ID =1mA  | 2   |     | 4   | V    |
| R <sub>DS(on)</sub> | Drain-Source On-Resistance     | V <sub>GS</sub> =10V; I <sub>D</sub> =1.5A  |     |     | 4.3 | Ω    |
| I <sub>GSS</sub>    | Gate-Source Leakage Current    | V <sub>GS</sub> = ±30V                      |     |     | 10  | μА   |
| I <sub>DSS</sub>    | Drain-Source Leakage Current   | V <sub>DS</sub> =720V; V <sub>GS</sub> = 0V |     |     | 100 | μА   |
| V <sub>SD</sub>     | Diode forward voltage          | I <sub>F</sub> =3A; V <sub>GS</sub> = 0V    |     |     | 1.9 | V    |

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