

# isc N-Channel MOSFET Transistor

## **TK11A65D**

#### FEATURES

- Drain-source on-resistance:
  R<sub>DS</sub>(on) ≤ 0.7Ω@10V
- · Fast Switching Speed
- · 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

#### APPLICATIONS

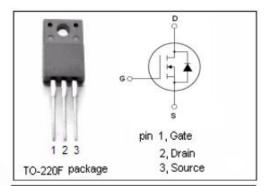
· High fast switching Power Supply

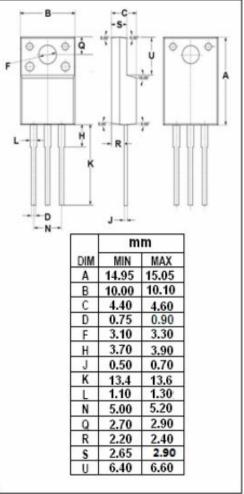
## • ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| SYMBOL           | PARAMETER                               | VALUE   | UNIT         |  |
|------------------|---|---------|--------------|--|
| V <sub>DSS</sub> | Drain-Source Voltage                    | 650     | V            |  |
| V <sub>GS</sub>  | Gate-Source Voltage                     | ±30     | V            |  |
| I <sub>D</sub>   | Drain Current-Continuous                | 11      | А            |  |
| I <sub>DM</sub>  | Drain Current-Single Pulsed             | 44      | А            |  |
| P <sub>D</sub>   | Total Dissipation @T <sub>C</sub> =25℃  | 45      | W            |  |
| Tj               | Max. Operating Junction Temperature 150 |         | $^{\circ}$   |  |
| T <sub>stg</sub> | Storage Temperature                     | -55~150 | $^{\circ}$ C |  |

## • THERMAL CHARACTERISTICS

| SYMBOL    | PARAMETER                          | MAX  | UNIT |  |
|-----------|------------------------------------|------|------|--|
| Rth(ch-c) | Channel-to-case thermal resistance | 2.78 | °C/W |  |





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#### **ELECTRICAL CHARACTERISTICS**

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

| SYMBOL              | PARAMETER                      | CONDITIONS   | MIN | ТҮР | MAX | UNIT       |
|---------------------|--------------------------------|--|-----|-----|-----|------------|
| BV <sub>DSS</sub>   | Drain-Source Breakdown Voltage | V <sub>GS</sub> =0V; I <sub>D</sub> = 250 μ A                | 650 |     |     | V          |
| V <sub>GS(th)</sub> | Gate Threshold Voltage         | V <sub>DS</sub> = V <sub>GS</sub> ; I <sub>D</sub> = 250 μ A | 2   |     | 4   | V          |
| R <sub>DS(on)</sub> | Drain-Source On-Resistance     | V <sub>GS</sub> =10V; I <sub>D</sub> =5.5A                   |     |     | 0.7 | Ω          |
| I <sub>GSS</sub>    | Gate-Source Leakage Current    | V <sub>GS</sub> = ±30V;V <sub>DS</sub> = 0V                  |     |     | ±1  | μ <b>А</b> |
| I <sub>DSS</sub>    | Drain-Source Leakage Current   | V <sub>DS</sub> = 650V; V <sub>GS</sub> = 0V                 |     |     | 10  | μ <b>А</b> |
| V <sub>SD</sub>     | Diode forward on voltage       | I <sub>SD</sub> =11A, V <sub>GS</sub> = 0 V                  |     |     | 1.7 | V          |

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