

# Isc N-Channel MOSFET Transistor

# STP26NM60N

**• FEATURES**

- Low input capacitance and gate charge
- Low gate input resistances
- 100% avalanche tested
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

**• APPLICATIONS**

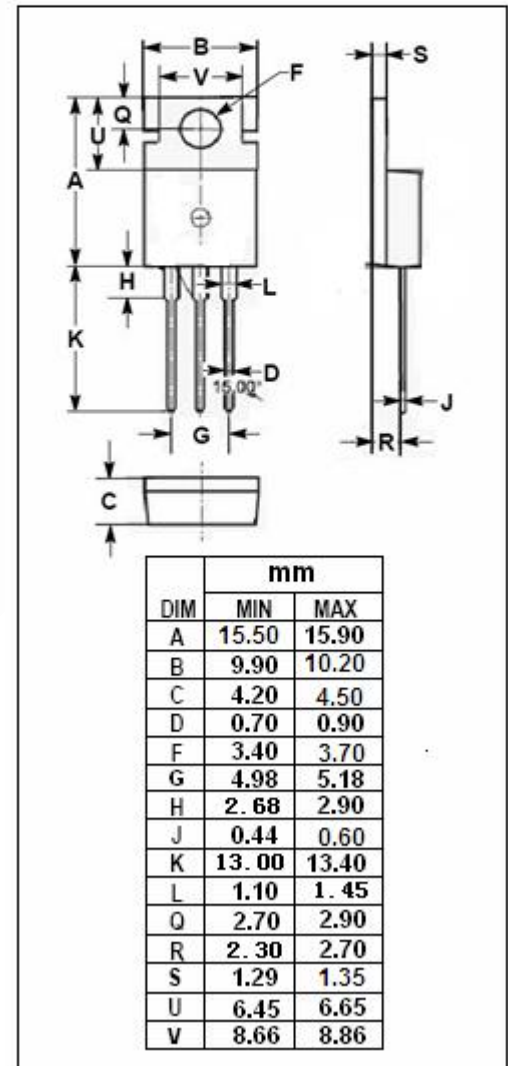
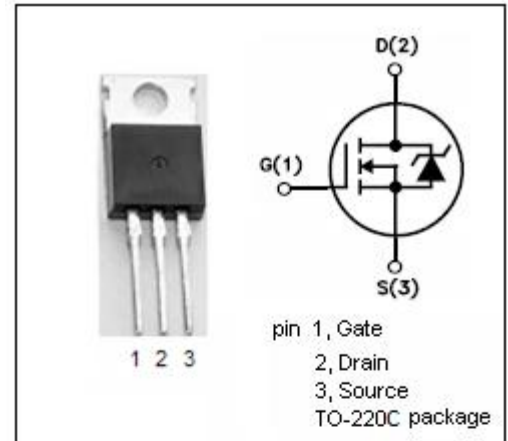
- Switching applications

**• ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)**

| SYMBOL           | PARAMETER  | VALUE      | UNIT |
|------------------|--|------------|------|
| V <sub>DSS</sub> | Drain-Source Voltage   | 600        | V    |
| V <sub>GSS</sub> | Gate-Source Voltage  | ±25        | V    |
| I <sub>D</sub>   | Drain Current-Continuous@T <sub>c</sub> =25°C<br>T <sub>c</sub> =100°C | 20<br>12.6 | A    |
| I <sub>DM</sub>  | Drain Current-Single Pulsed  | 80         | A    |
| P <sub>D</sub>   | Total Dissipation  | 140        | W    |
| T <sub>j</sub>   | Operating Junction Temperature   | -55~150    | °C   |
| T <sub>stg</sub> | Storage Temperature  | -55~150    | °C   |

**• THERMAL CHARACTERISTICS**

| SYMBOL    | PARAMETER                             | MAX  | UNIT |
|-----------|---------------------------------------|------|------|
| Rth(ch-c) | Channel-to-case thermal resistance    | 0.89 | °C/W |
| Rth(ch-a) | Channel-to-ambient thermal resistance | 62.5 | °C/W |



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**ELECTRICAL CHARACTERISTICS**

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

| SYMBOL              | PARAMETER                      | CONDITIONS  | MIN | TYP | MAX      | UNIT |
|---------------------|--------------------------------|---|-----|-----|----------|------|
| BV <sub>DSS</sub>   | Drain-Source Breakdown Voltage | V <sub>GS</sub> =0V; I <sub>D</sub> = 1mA   | 600 |     |          | V    |
| V <sub>GS(th)</sub> | Gate Threshold Voltage         | V <sub>DS</sub> =±25V; I <sub>D</sub> =0.1mA  | 2   |     | 4        | V    |
| R <sub>DS(on)</sub> | Drain-Source On-Resistance     | V <sub>GS</sub> = 10V; I <sub>D</sub> =10A  |     | 135 | 165      | mΩ   |
| I <sub>GSS</sub>    | Gate-Source Leakage Current    | V <sub>GS</sub> = ±25V; V <sub>DS</sub> = 0V  |     |     | ±0.1     | μA   |
| I <sub>DSS</sub>    | Drain-Source Leakage Current   | V <sub>DS</sub> = 600V; V <sub>GS</sub> = 0V; T <sub>J</sub> =25°C<br>T <sub>J</sub> =125°C |     |     | 1<br>100 | μA   |
| V <sub>SDF</sub>    | Diode forward voltage          | I <sub>SD</sub> =20A, V <sub>GS</sub> = 0 V   |     |     | 1.5      | V    |