

| PRODUCT SUMMARY  |                |                             |
|------------------|----------------|-----------------------------|
| V <sub>DSS</sub> | I <sub>D</sub> | R <sub>DS(ON)</sub> (mΩ)    |
| 25V              | 12A            | 60 @ V <sub>GS</sub> = 10V  |
|                  |                | 85 @ V <sub>GS</sub> = 4.5V |

## FEATURES

- Super high dense cell design for low R<sub>DS(ON)</sub>.
- Rugged and reliable.
- TO252 and TO251 Package



## ABSOLUTE MAXIMUM RATINGS (T<sub>c</sub>=25. unless otherwise noted)

| Parameter   | Symbol                            | Limit      | Unit |
|---|-----------------------------------|------------|------|
| Drain-Source Voltage Rating   | V <sub>spike</sub> <sup>c</sup>   | 30         | V    |
| Drain-Source Voltage  | V <sub>DS</sub>                   | 25         | V    |
| Gate-Source Voltage   | V <sub>GS</sub>                   | ±16        | V    |
| Drain Current-Continuous @ T <sub>c</sub> =25°C<br>-Pulsed <sup>a</sup> | I <sub>D</sub>                    | 12         | A    |
|   | I <sub>DM</sub>                   | 40         | A    |
| Drain-Source Diode Forward Current                                      | I <sub>S</sub>                    | 5          | A    |
| Maximum Power Dissipation @ T <sub>c</sub> =25°C                        | P <sub>D</sub>                    | 50         | W    |
| Operating and Storage Temperature Range                                 | T <sub>J</sub> , T <sub>STG</sub> | -55 to 175 | °C   |
| THERMAL CHARACTERISTICS   |                                   |            |      |
| Thermal Resistance, Junction-to-Case                                    | R <sub>θJC</sub>                  | 3          | °C/W |
| Thermal Resistance, Junction-to-Ambient                                 | R <sub>θJA</sub>                  | 50         | °C/W |