

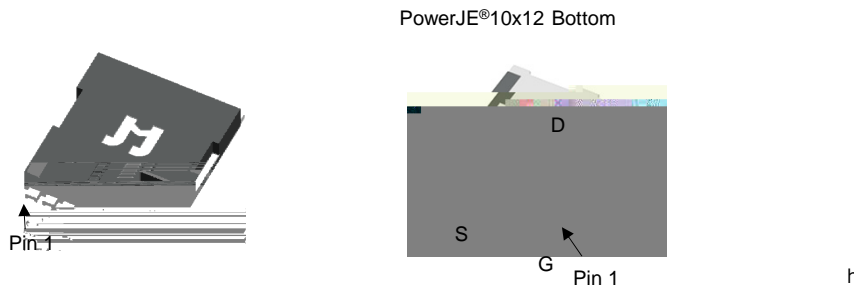
100V 1.3mΩ TOLL N-Ch Power MOSFET

Features

Product Summary

| Parameter | Value | Unit |
|--|-------|------|
| V_{DS} | 100 | V |
| $V_{GS(th_Typ)}$ | 2.8 | V |
| I_D (@ $V_{GS} = 10V$) ⁽¹⁾ | 411 | A |
| $R_{DS(ON_Typ)}$ (@ $V_{GS} = 10V$) | 1.3 | mΩ |

Applications



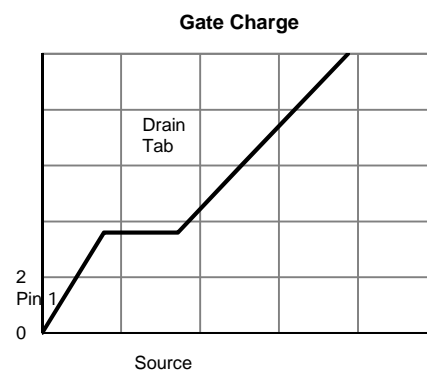
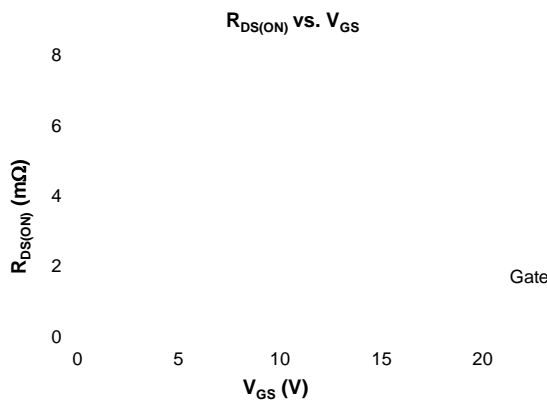
Ordering Information

| Device | Package | # of Pins | Marking | MSL | T_J (°C) | Media | Quantity (pcs) |
|----------------|------------------------------|-----------|---------|-----|------------|--------------|----------------|
| JMSH1001ATL-13 | PowerJE®10x12 ⁽¹⁾ | 8 | SH1001A | 1 | -55 to 175 | 13-inch Reel | 2000 |

Note 1: PowerJE® is a registered trademark of JieJie Micro., its package outline is compatible to that of TO-LeadLess (TOLL).

Absolute Maximum Ratings (@ $T_A = 25^\circ C$ unless otherwise specified)

| Parameter | Symbol | Value | Unit |
|---|----------------|---------------------|-------------------|
| | V_{DS} | | V |
| | V_{GS} | | Power Dissipation |
| Continuous Drain Current ⁽²⁾ | I_D | $T_C = 25^\circ C$ | 411 |
| | | $T_C = 100^\circ C$ | 290 |
| Pulsed Drain Current ⁽³⁾ | I_{DM} | 1343 | A |
| Avalanche Current ⁽⁴⁾ | I_{AS} | 50 | A |
| Avalanche Energy ⁽⁴⁾ | E_{AS} | 1250 | mJ |
| | P_D | $T_C = 25^\circ C$ | 500 |
| | | $T_C = 100^\circ C$ | 250 |
| | T_J, T_{STG} | | °C |





Typical Electrical & Thermal Characteristics

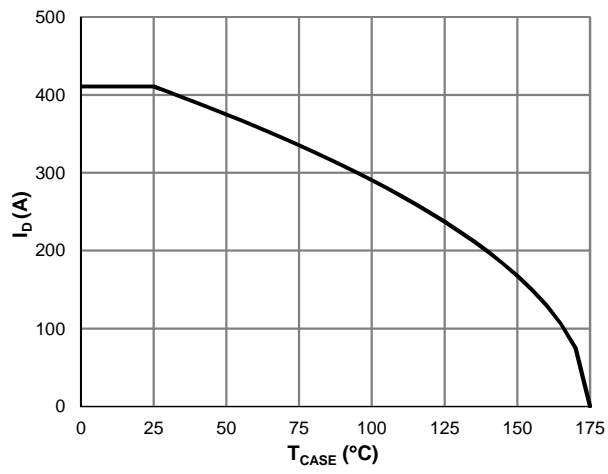


Figure 7: Current De-rating

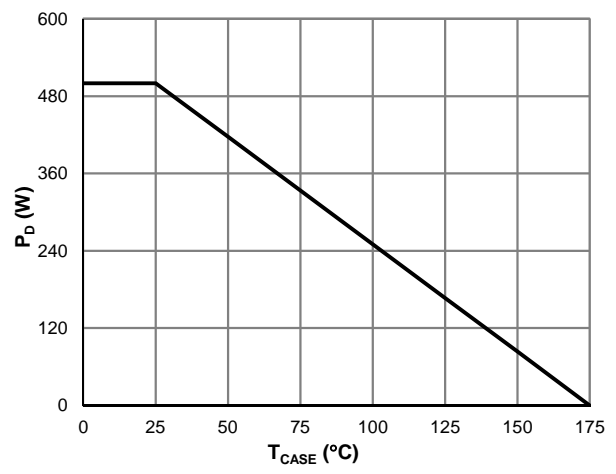
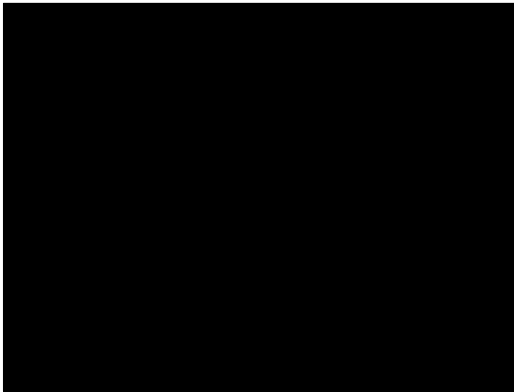
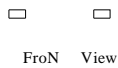
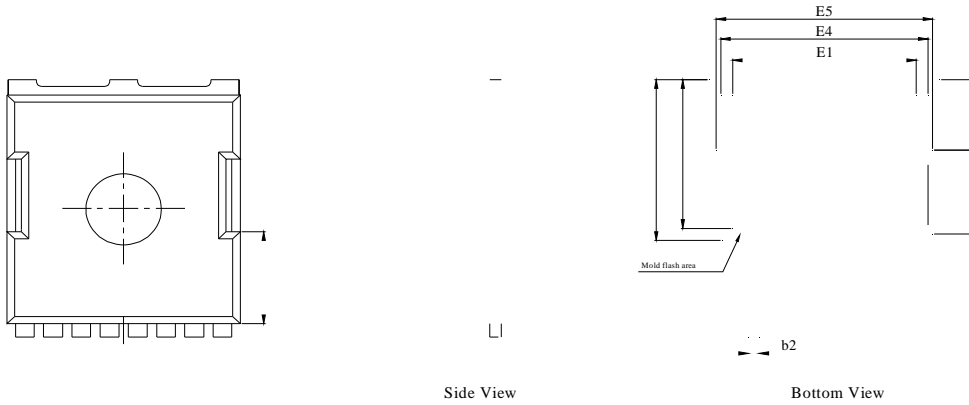


Figure 8: Power De-rating



PowerJE® 10x12 Package Information

Package Outlines



NOTES:

1. Dimension and tolerance per ASME Y14.5M, 1994.
2. All dimensions in millimeter.
3. Dimensions include burrs or flash. Moldflash burrs does not exceed 0.150mm.

| DIM. | MILLIMETER | | |
|------|------------|------------|-------|
| | MIN. | NOM. | MAX. |
| A | 2.20 | 2.30 | 2.40 |
| b | 0.70 | 0.80 | 0.90 |
| b1 | 9.70 | 9.80 | 9.90 |
| b2 | 0.42 | 0.46 | 0.50 |
| c | 0.40 | 0.50 | 0.60 |
| D | 10.28 | 10.38 | 10.58 |
| D2 | | 3.30 | |
| E | 9.70 | 9.90 | 10.10 |
| E1 | | 7.80 | |
| E4 | | 8.80 | |
| E5 | | 9.20 | |
| e | | 1.20 (BSC) | 11.48 |
| | | H1 | 6.55 |
| | | H2 | 6.75 |
| | | H3 | 7.30 |
| | | H4 | 3.20 |
| | | H4 | 3.80 |
| | | K1 | 4.18 |
| | | L | 1.70 |
| | | L1 | 1.90 |
| | | L1 | 0.70 |
| | | L2 | 0.60 |
| | | L2 | 0.60 |
| | | L4 | 1.00 |
| | | L4 | 1.15 |
| | | L4 | 1.30 |

Recommended Solder Pad Footprint

