

**LV30200CT**  
Rev. H Jul.-2018



**DATA SHEET**

/ Absolute Maximum Ratings( $T_a=25^\circ\text{C}$ )

| Parameter                                                                              | Symbol                            | Rating        | Unit                      |
|----------------------------------------------------------------------------------------|-----------------------------------|---------------|---------------------------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage | $V_{RM}$<br>$V_{RSM}$<br>$V_{DC}$ | 200           | V                         |
| RMS Reverse Voltage                                                                    | $V_{RMS}$                         | 140           | V                         |
| Average Rectified Forward Current                                                      | $I_{F(AV)}$                       | $2\times 15$  | A                         |
| Non Repetitive Peak Surge Current                                                      | $I_{FSM}$                         | 200           | A                         |
| Thermal Resistance Junction to Case                                                    | $R_{\theta JC}$                   | 4.6           | $^\circ\text{C}/\text{W}$ |
| Junction and Storage Temperature Range                                                 | $T_j$ $T_{stg}$                   | $-40\sim+150$ | $^\circ\text{C}$          |

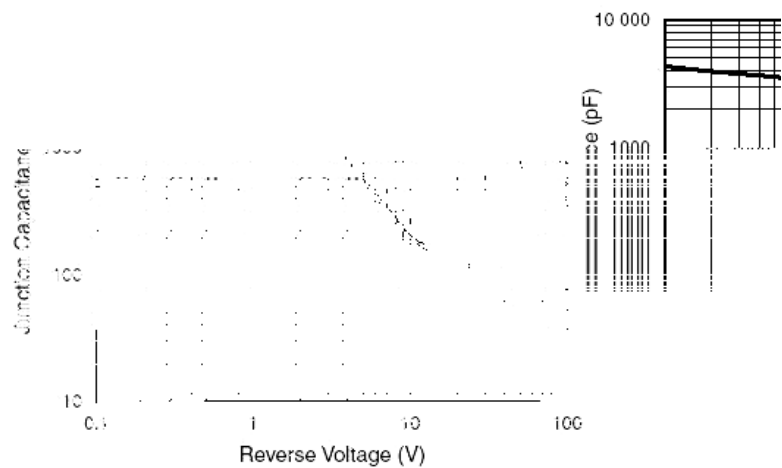
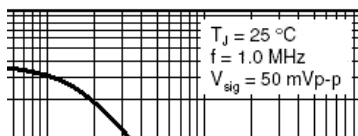
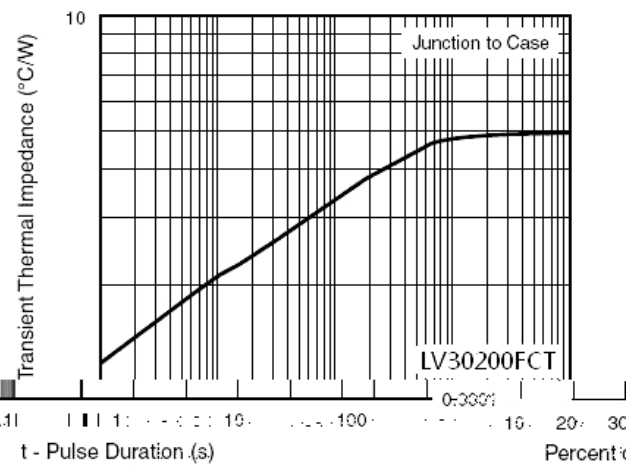
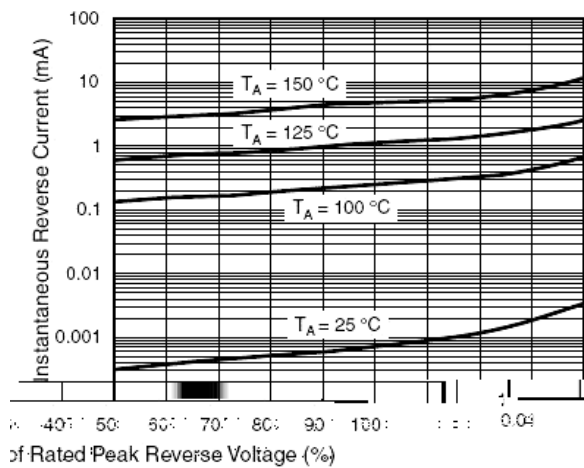
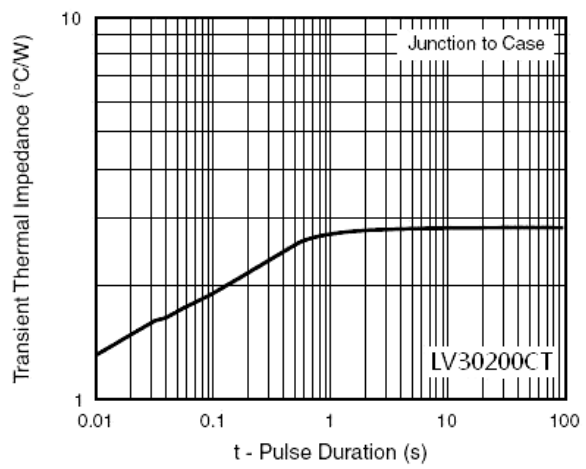
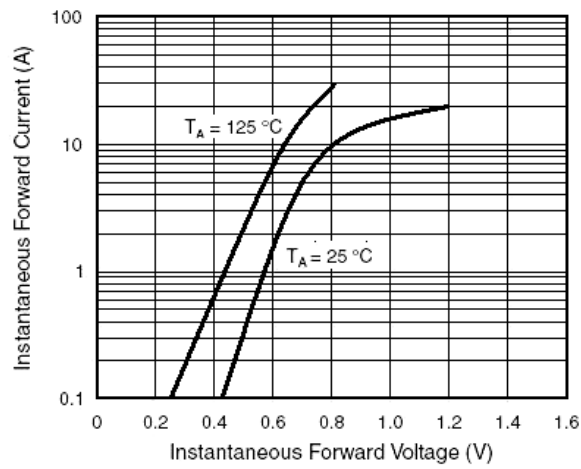
/ Electrical Characteristics( $T_a=25^\circ\text{C}$ )

| Parameter                     | Symbol            | Test Conditions                          | Min | Typ  | Max  | Unit          |
|-------------------------------|-------------------|------------------------------------------|-----|------|------|---------------|
| Breakdown Reverse Voltage     | $V_{BR}$          | $I_R=1\text{mA}(T_a=25^\circ\text{C})$   | 200 |      |      | V             |
| Forward Voltage               | $V_F$             | $I_F=5\text{A}(T_a=25^\circ\text{C})$    |     | 0.73 | 0.85 | V             |
|                               |                   | $I_F=10\text{A}(T_a=25^\circ\text{C})$   |     | 0.80 | 0.95 | V             |
|                               |                   | $I_F=15\text{A}(T_a=25^\circ\text{C})$   |     | 0.92 | 1.15 | V             |
|                               |                   | $I_F=5\text{A}(T_a=125^\circ\text{C})$   |     | 0.58 |      | V             |
|                               |                   | $I_F=10\text{A}(T_a=125^\circ\text{C})$  |     | 0.66 |      | V             |
|                               |                   | $I_F=15\text{A}(T_a=125^\circ\text{C})$  |     | 0.71 | 0.85 | V             |
| Instantaneous Reverse Current | $I_R$<br>(Note 1) | $V_R=200\text{V}(T_a=25^\circ\text{C})$  |     | 4    | 20   | $\mu\text{A}$ |
|                               |                   | $V_R=200\text{V}(T_a=125^\circ\text{C})$ |     | 5    | 10   | mA            |

/Notes:

1.  $t_{on}$  / Short duration pulse test used to minimize self-heating effect.
2.  $t_{on}$  / Unless otherwise noted, values for the parameters of a single chip

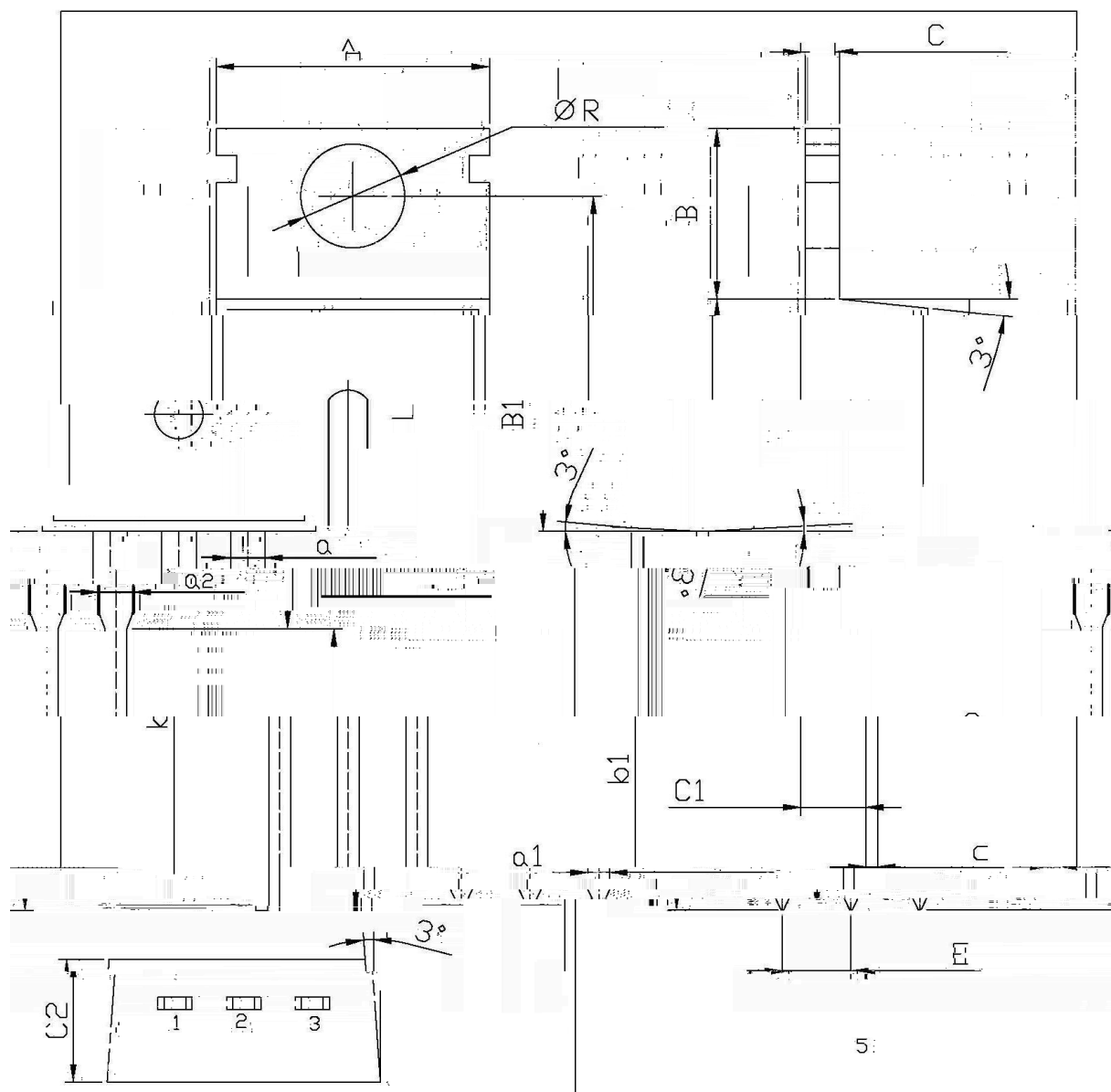
/ Electrical Characteristic Curve



## / Package Dimensions

T0-220

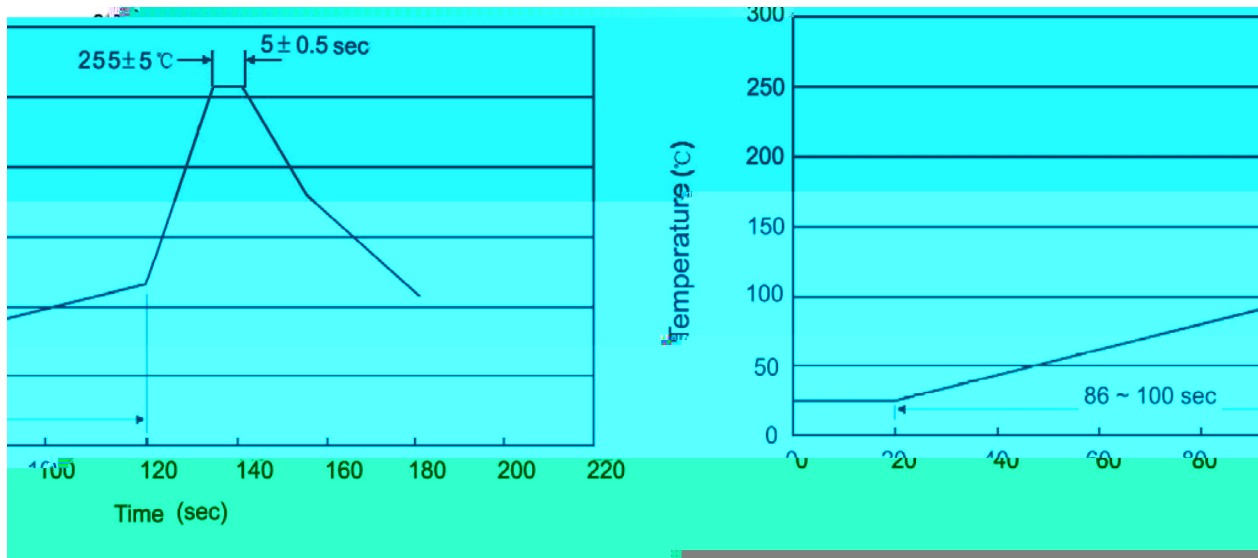
单位: 



| Symbol |  | Min  | Max  | Symbol |  | Min  | Max  |
|--------|--|------|------|--------|--|------|------|
| 98     |  | 3.56 | 3.64 | 98     |  | 6.3  | 6.7  |
| 15.7   |  | 16.1 | 16.1 | 15.7   |  | 9.0  | 9.4  |
| 2.6    |  | 2.6  | 2.6  | 2.6    |  | 2.2  | 2.2  |
| 1.32   |  | 0.4  | 0.6  | 1.32   |  | 0.4  | 0.6  |
| 2.74   |  | 4.3  | 4.7  | 2.74   |  | 4.3  | 4.7  |
| Q2     |  | 1.25 | 1.45 | Q2     |  | 1.25 | 1.45 |



## ( ) / Temperature Profile for Dip Soldering(Pb-Free)



## Note:

- 1 25 150 60 90sec;
- 2 255±5 5±0.5sec;
- 3 2 10 /sec.

- 1.Preheating:25~150 , Time:60~90sec.
- 2.Peak Temp.:255±5 , Duration:5±0.5sec.
3. Cooling Speed: 2~10 /sec.

## / Resistance to Soldering Heat Test Conditions

270±5

10±1 sec.

Temp.:270±5

Time:10±1 sec

## / Packaging SPEC.

## / BULK

| Package Type<br>封装形式 | Units 包装数量       |                       |                        |                              |                        | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |             |             |
|----------------------|------------------|-----------------------|------------------------|------------------------------|------------------------|-----------------------------------------|-------------|-------------|
|                      | Units/Bag<br>只/袋 | Bags/Inner Box<br>袋/盒 | Units/Inner Box<br>只/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>只/箱 | Bag 袋                                   | Inner Box 盒 | Outer Box 箱 |
| TO-220/F             | 200              | 10                    | 2,000                  | 5                            | 10,000                 | 135×190                                 | 237×172×102 | 560×245×195 |

## / TUBE

| Package Type<br>封装形式 | Units 包装数量         |                         |                        |                              |                        | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |             |             |
|----------------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|-----------------------------------------|-------------|-------------|
|                      | Units/Tube<br>只/套管 | Tubes/Inner Box<br>套管/盒 | Units/Inner Box<br>只/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>只/箱 | Tube 套管                                 | Inner Box 盒 | Outer Box 箱 |
| TO-220/F             | 50                 | 20                      | 1,000                  | 5                            | 5,000                  | 532×31.4×5.5                            | 555×164×50  | 575×290×180 |

## / Notices