

**/ Descriptions**

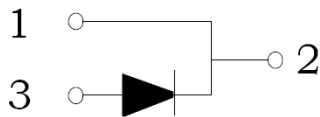
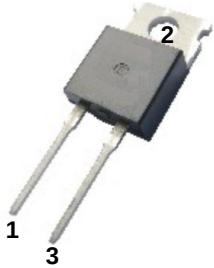
Schottky Barrier Diode in a TO-220AC Plastic Package.

**/ Features**

Low power loss,high efficiency .

**/ Applications**

For use in low voltage,high frequency inverters, free wheeling, and polarity protection applications.

**/ Equivalent Circuit****/ Pinning**

PIN1 2 Cathode

PIN 3 Anode

**/  $h_{FE}$  Classifications & Marking**

See Marking Instructions

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

| Parameter                                   | Symbol          | Rating  | Unit                      |
|---------------------------------------------|-----------------|---------|---------------------------|
| Peak Repetitive Reverse Voltage             | $V_{RRM}$       | 100     | V                         |
| RMS Voltage                                 | $V_R$           | 100     | V                         |
| Average Forward Rectified Current           | $I_{F(AV)}$     | 10      | A                         |
| Peak forward surge current                  | $I_{FSM}$       | 150     | A                         |
| Typical Thermal Resistance Junction to Case | $R_{\theta Jc}$ | 2.0     | $^\circ\text{C}/\text{W}$ |
| Junction Temperature Range                  | $T_J$           | 150     | $^\circ\text{C}$          |
| Storage Temperature Range                   | $T_{stg}$       | -55~150 | $^\circ\text{C}$          |

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

| Parameter                          | Symbol   | Test Conditions                           | Min | Typ | Max  | Unit |
|------------------------------------|----------|-------------------------------------------|-----|-----|------|------|
| Reverse Voltage                    | $V_R$    | $I_R=10\text{ A}$                         | 100 |     |      | V    |
| Forward Voltage                    | $V_F$    | $I_F=10\text{A}$                          |     |     | 0.7  | V    |
|                                    |          | $I_F=10\text{A}$ $T_C=125^\circ\text{C}$  |     |     | 0.8  | V    |
|                                    |          | $I_F=20\text{A}$                          |     |     | 0.95 | V    |
|                                    |          | $I_F=20\text{A}$ $T_C=125^\circ\text{C}$  |     |     | 0.85 | V    |
| Peak Instantaneous Reverse Current | $I_{RM}$ | $V_R=100\text{V}$                         |     |     | 0.1  | mA   |
|                                    |          | $V_R=100\text{V}$ $T_C=125^\circ\text{C}$ |     |     | 6    | mA   |

## / Electrical Characteristic Curve

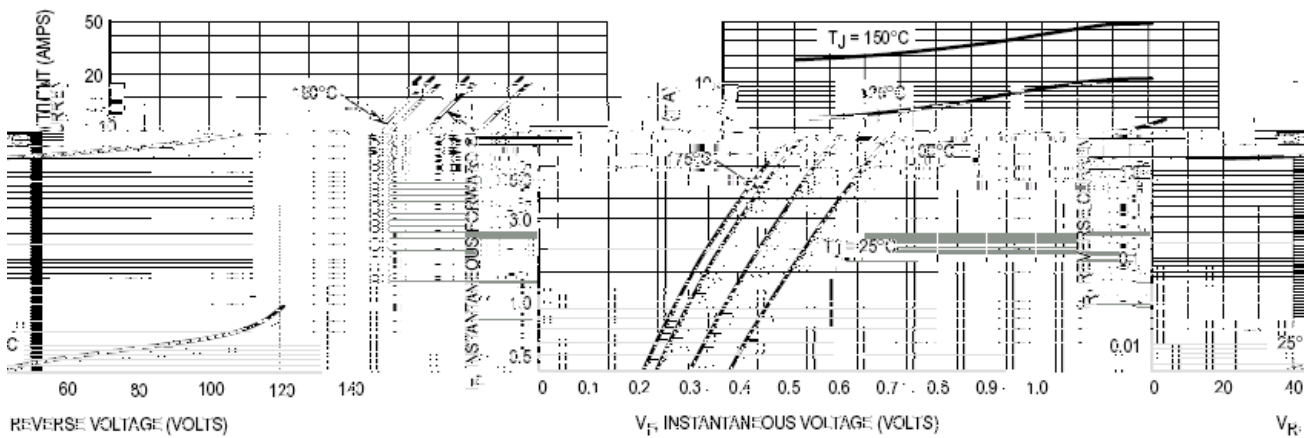


Figure 1. Typical Forward Voltage

Figure 2. Typical Reverse Current

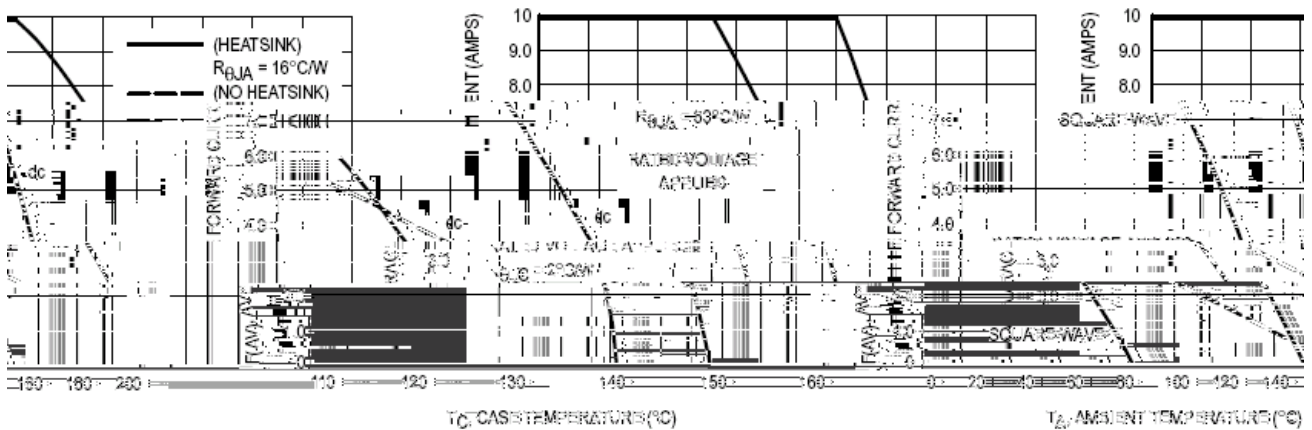


Figure 3. Current Derating, Case

Figure 4. Current Derating, Ambient

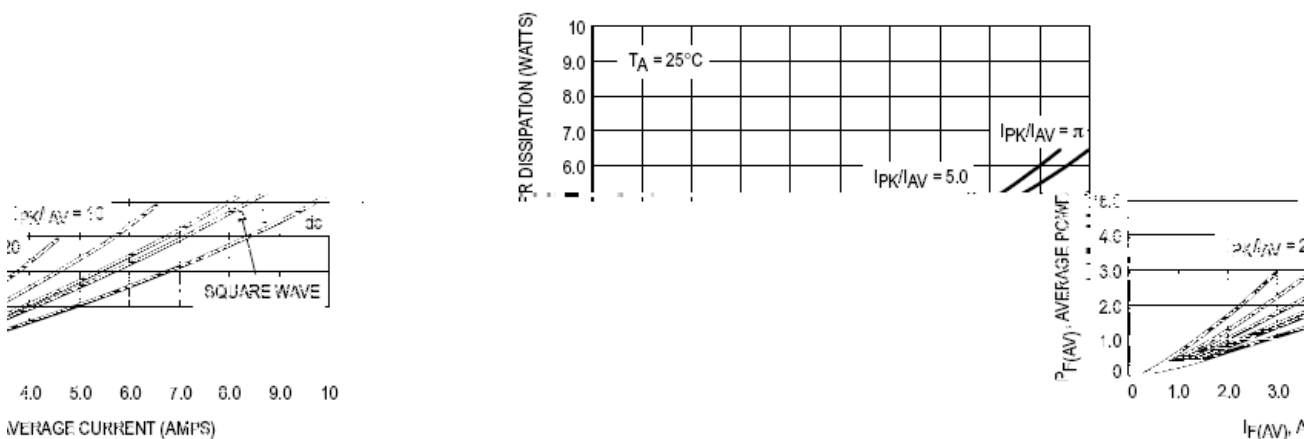


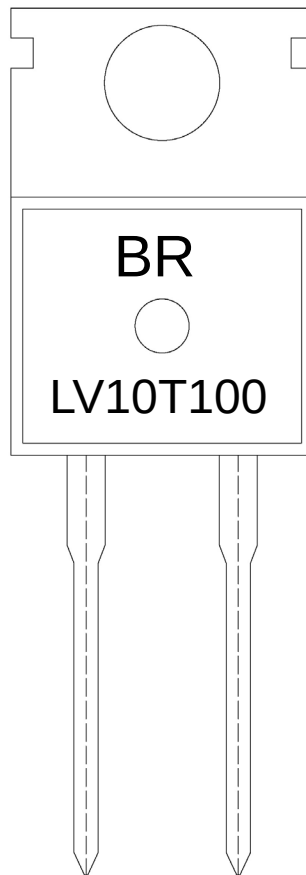
Figure 5. Forward Power Dissipation

# **BRLV10T100AC**

Rev.H Apr.-2019

**DATA SHEET**

**/ Marking Instructions**



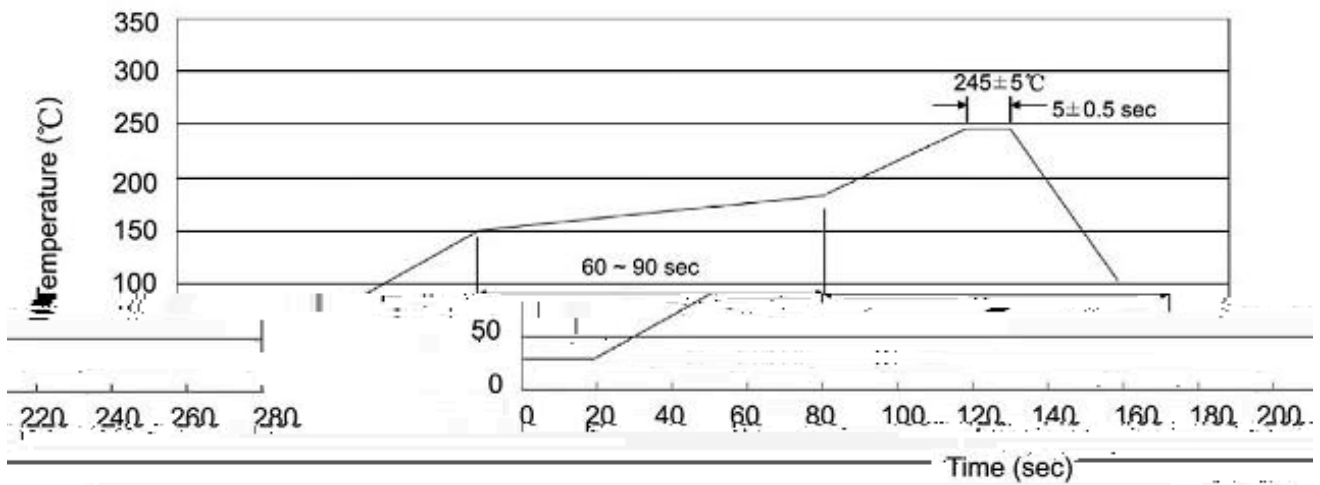
Note:

BR: Company Code

Product Type.

\*\*\*: Lot No. Code, code change with Lot No.

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



Note:

- |   |     |     |    |         |                                         |
|---|-----|-----|----|---------|-----------------------------------------|
| 1 | 150 | 180 | 60 | 90sec;  | 1.Preheating:150~180 , Time:60~90sec.   |
| 2 | 255 | 5   | 5  | 0.5sec; | 2.Peak Temp.:255 5 , Duration:5 0.5sec. |
| 3 |     | 2   | 10 | /sec.   | 3. Cooling Speed: 2~10 /sec.            |

## / Resistance to Soldering Heat Test Conditions

270 5      10 1 sec.      Temp.:270±5°C      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> ) |   |   |
|----------------------|------------|----|----|----|----|-----------------------------------------|---|---|
|                      | 只袋         | 袋盒 | 只盒 | 盒箱 | 只箱 | 袋                                       | 盒 | 箱 |
|                      |            |    |    |    |    |                                         |   |   |

## / TUBE

| Package Type<br>封装形式 | Units 包装数量 |     |    |    |    | Dimension 包装尺寸 (unit: mm <sup>3</sup> ) |   |   |
|----------------------|------------|-----|----|----|----|-----------------------------------------|---|---|
|                      | 只套管        | 套管盒 | 只盒 | 盒箱 | 只箱 | 套管                                      | 盒 | 箱 |
|                      |            |     |    |    |    |                                         |   |   |

## / Notices