

/ Descriptions

TO-220AC

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

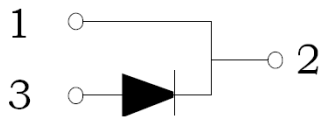
/ Features

Low power loss,high efficiency .

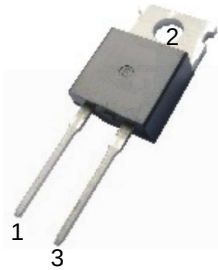
/ Applications

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	$I_R=10\mu\text{A}$	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

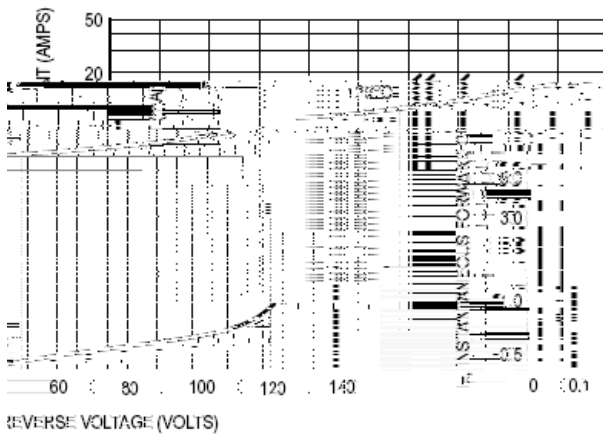


Figure 1. Typical Reverse Current

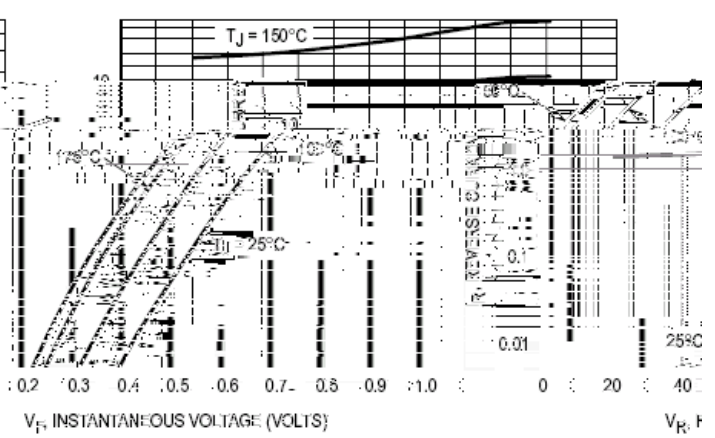


Figure 2. Typical Forward Voltage

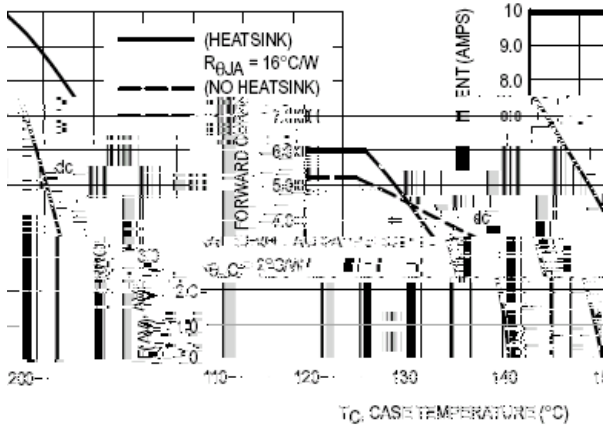


Figure 3. Current Derating, Case

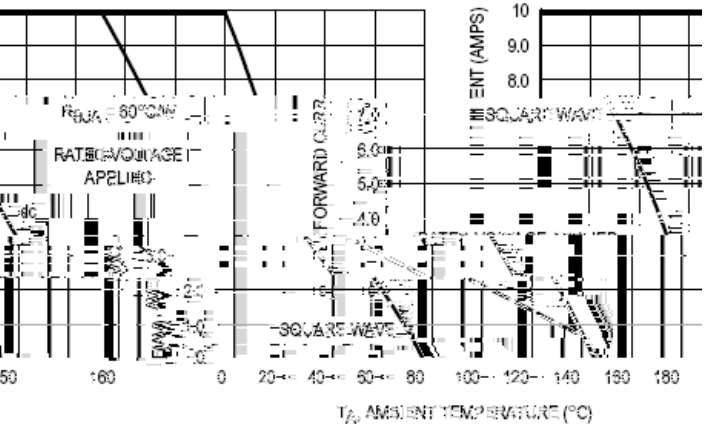


Figure 4. Current Derating, Ambient

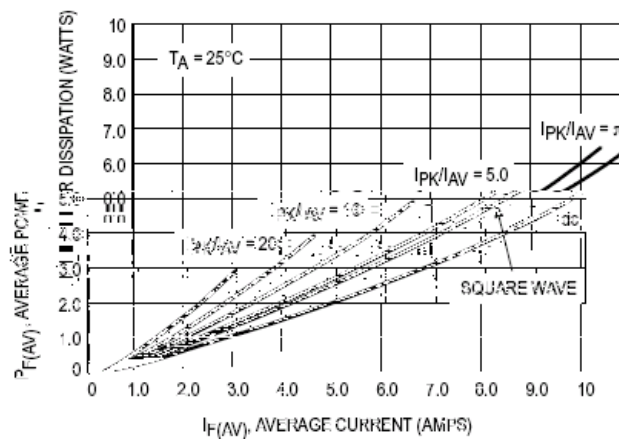
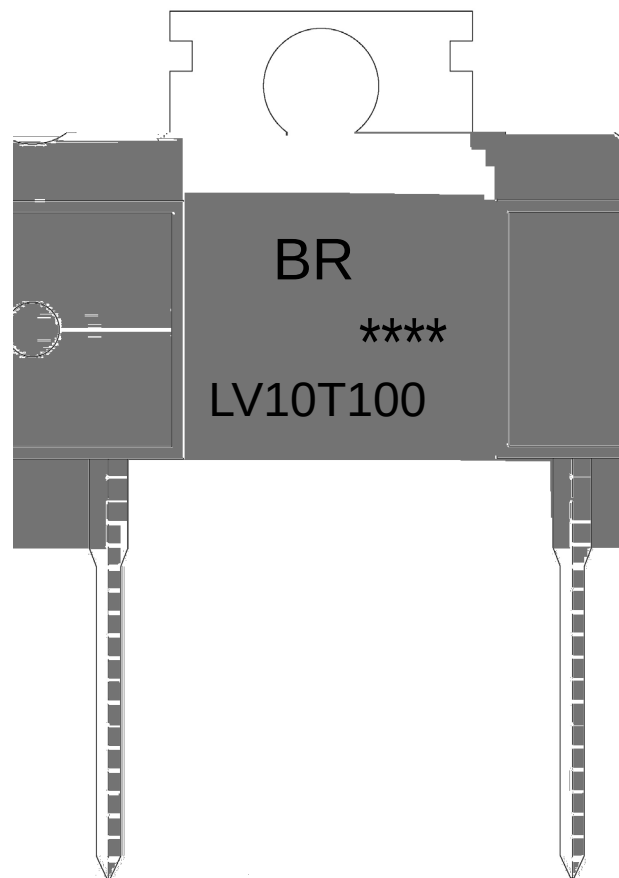


Figure 5. Forward Power Dissipation

/ Marking Instructions



BR

LV10T100

Note:

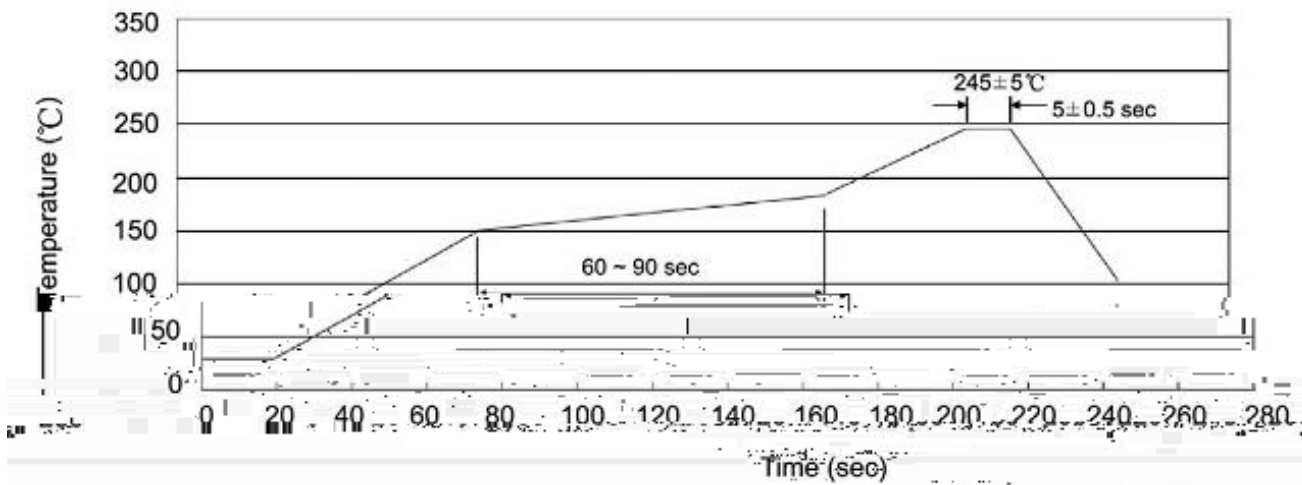
BR: Company Code

LV10T100 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℃ Time:10±1 sec

/ Packaging SPEC.

/ BULK

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

/ TUBE

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

/ Notices