## / Descriptions

TO-220AC

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

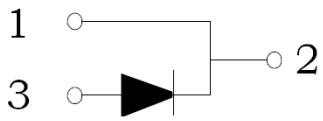
## / Features

Low power loss,high efficiency .

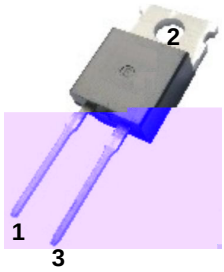
## / Applications

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

| 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 | /W |
| Junction Temperature Range | $T_j$ | 150 | |
| Storage Temperature Range | $T_{stg}$ | -55 150 | |

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

## / Electrical Characteristic Curve

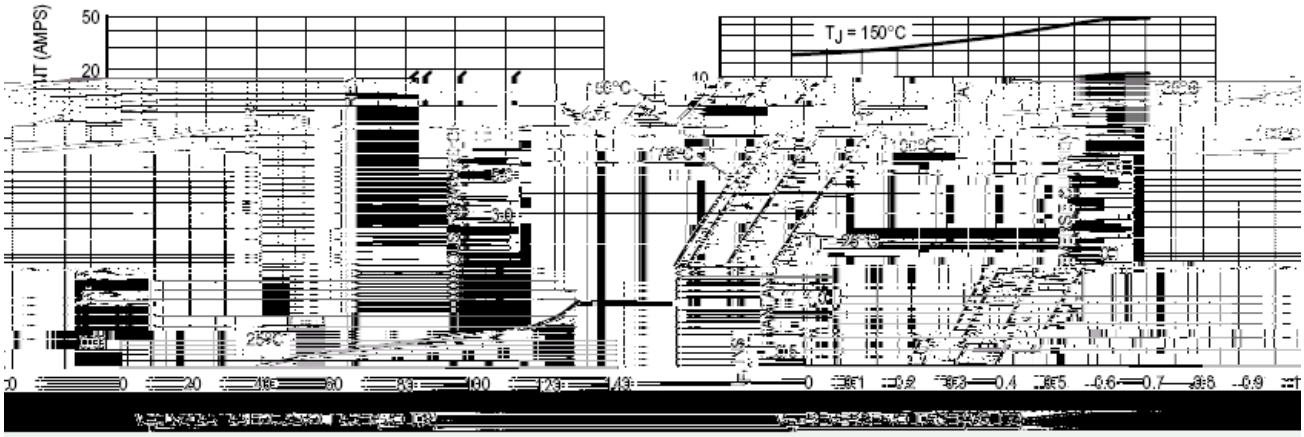
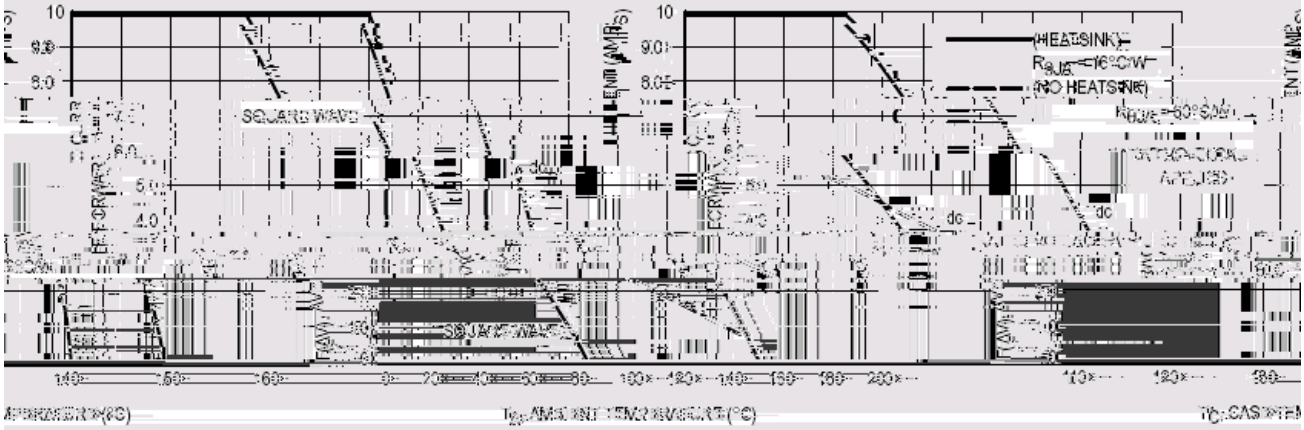



Figure 1. Typical Forward Voltage

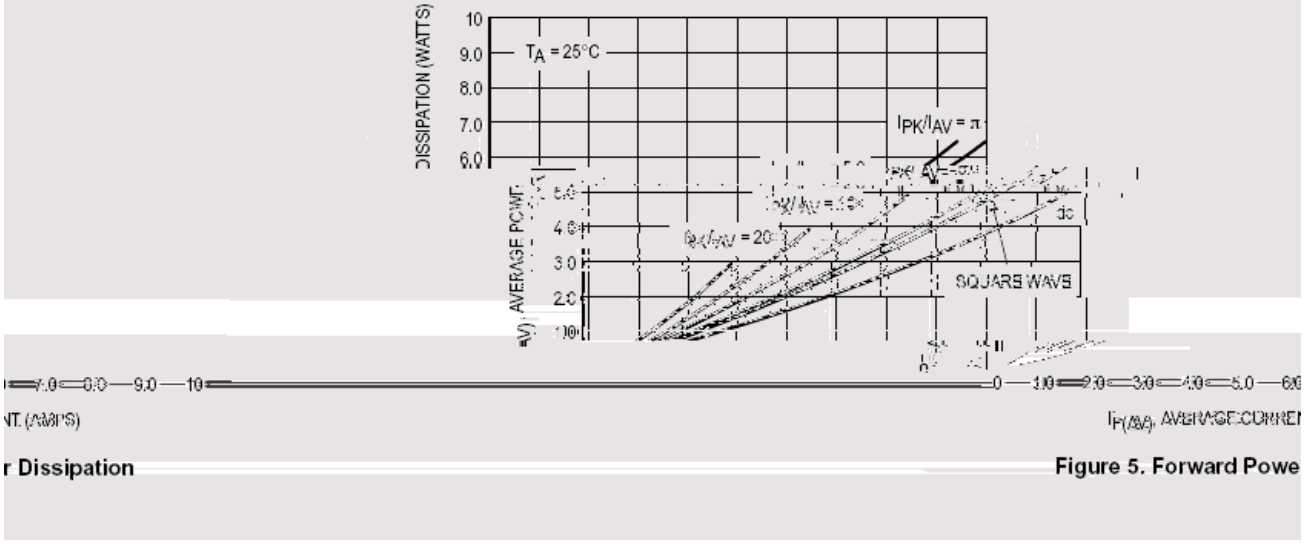
Figure 2. Typical Reverse Current




nt Derating, Case

Figure 4. Current Derating, Ambient

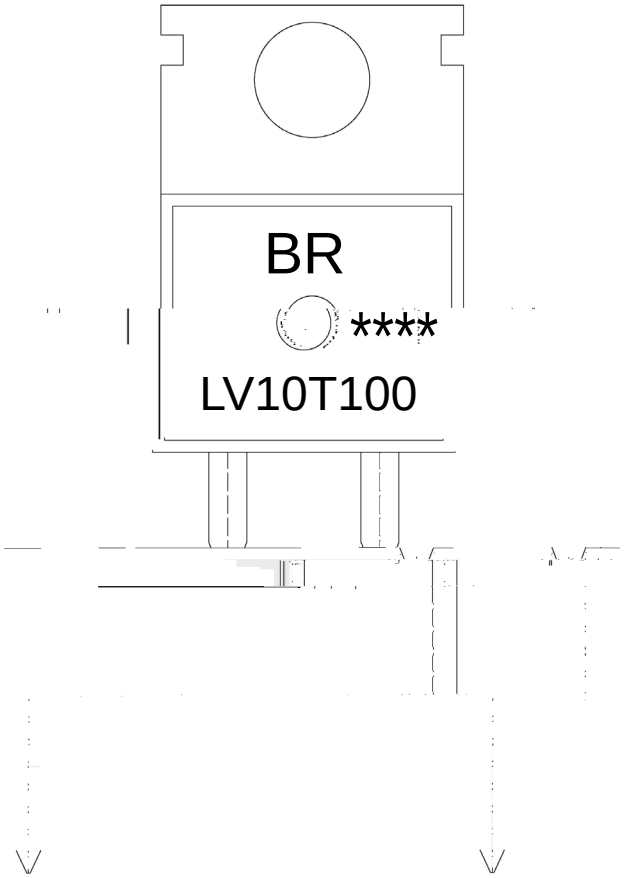
Figure 3. Curre




r Dissipation

Figure 5. Forward Powe

## / Marking Instructions




BR

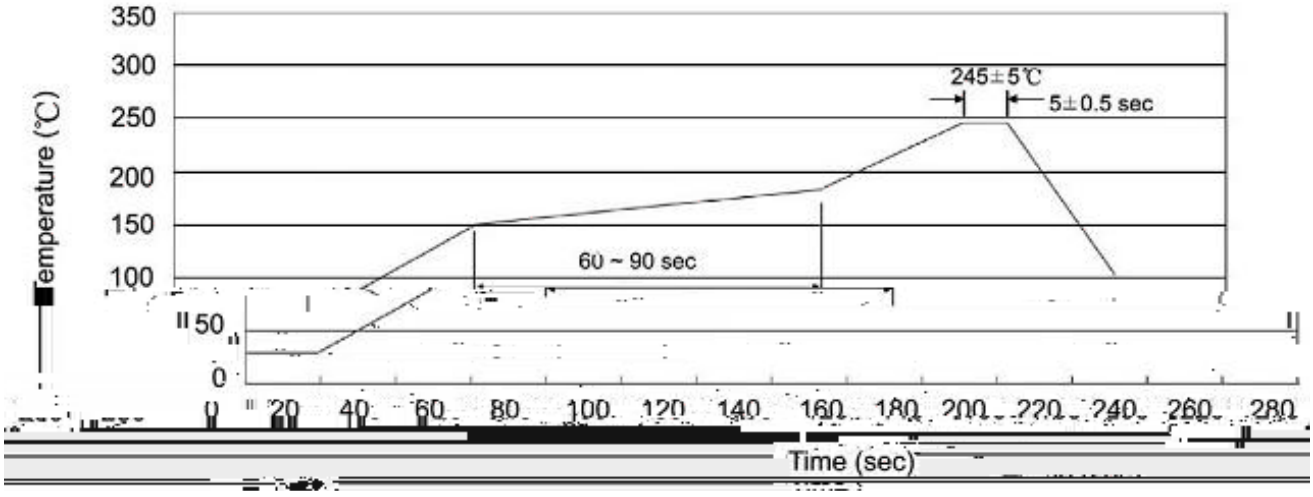
LV10T100

****

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 | Units | | | | | Dimension | | (unit mm³) |
|---|---|---|---|---|---|---|---|---|
| | Units/Bag / | Bags/Inner Box / | Units/Inner Box / | Inner Boxes/Outer Box / | Units/Outer Box / | Bag | Inner Box | Outer Box |
| TO-220/F/AC | 200 | 10 | 2,000 | 5 | 10,000 | 135×190 | 237×172×102 | 560×245×195 |

/ TUBE

| Package Type | Units | | | | | Dimension | | (unit mm³) |
|---|---|---|---|---|---|---|---|---|
| | Units/Tube / | Tubes/Inner Box / | Units/Inner Box / | Inner Boxes/Outer Box / | Units/Outer Box / | Tube | Inner Box | Outer Box |
| TO-220/F/AC | 50 | 20 | 1,000 | 5 | 5,000 | 532×31.4×5.5 | 555×164×50 | 575×290×180 |

## / Notices