## / Descriptions

Schottky Barrier Diode in a TO-220 Plastic Package.

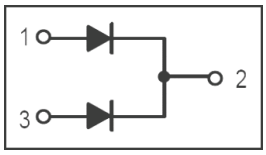
## / Features

Low forward voltage drop,low power losses,High efficiency operation.

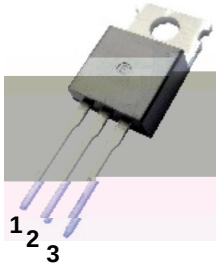
## / Applications

For use in high frequency inverters, switching power supplies, freewheeling diodes,
OR-ing diode, dc-to-dc converters and reverse battery protection.

## / Equivalent Circuit




## / Pinning




PIN1 Anode PIN 2 Cathode PIN 3 Anode

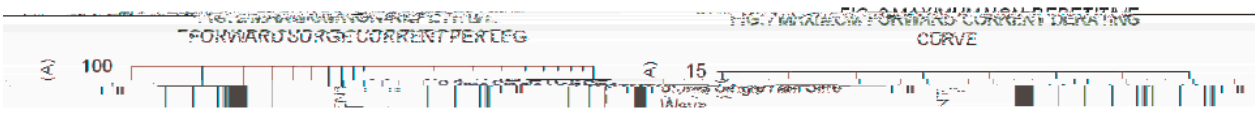
## / $h_{FE}$ Classifications & Marking

See Marking Instructions.

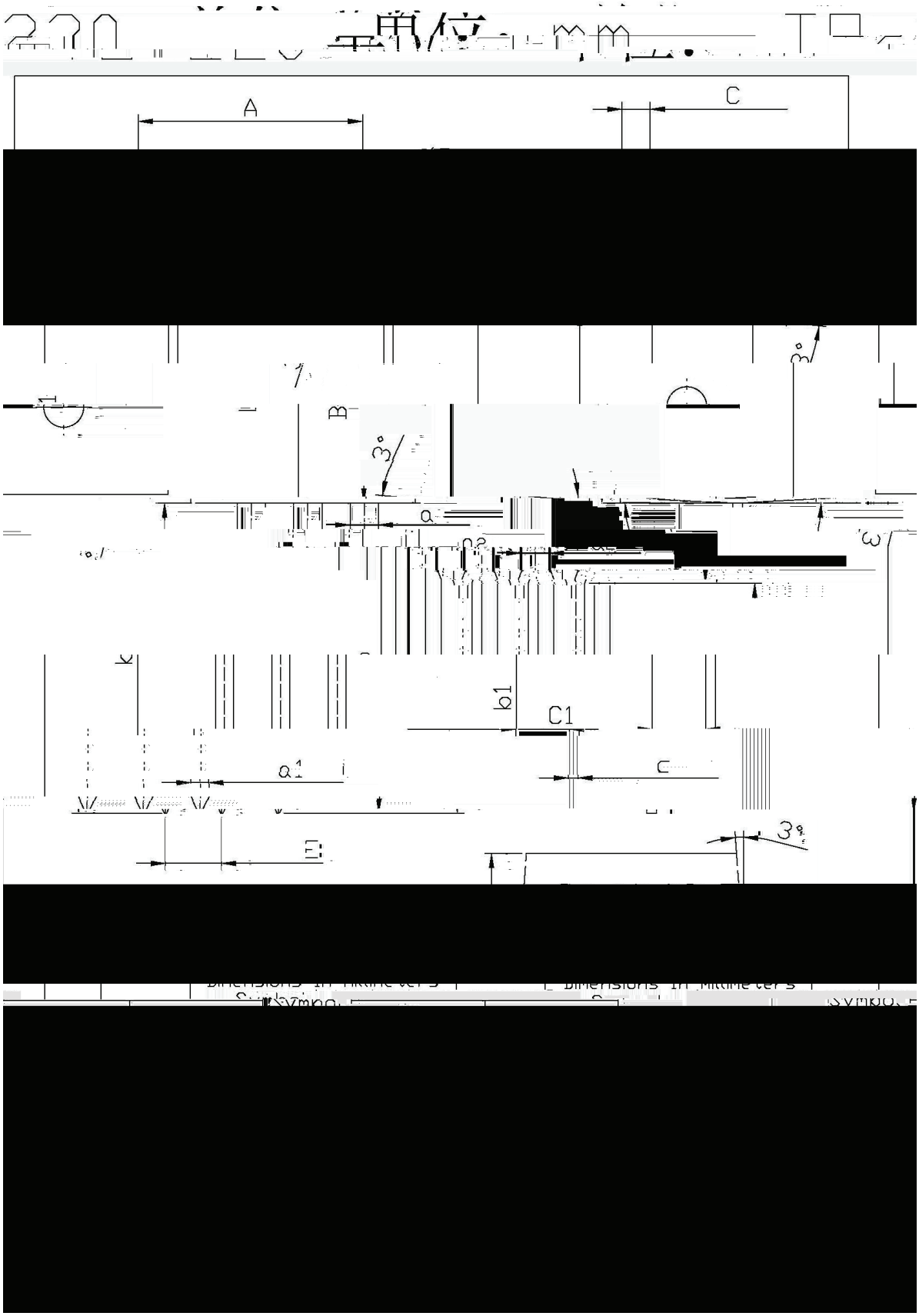
| Parameter | Symbol | Rating | Unit |
|---|---|---|---|
| Recurrent Peak Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage | $V_{RRM,}$<br>$V_{RSM}$<br>$V_{DC}$ | 100 | V |
| RMS Reverse Voltage | $V_{RMS}$ | 70 | V |
| Average forward rectified current | $I_{F(AV)}$ | 2 × 5 | A |
| Non Repetitive Peak Surge Current | $I_{FSM}$ | 80 | A |
| Thermal Resistance Junction to Case | $R_{\theta Jc}$ | 2.8 | /W |
| Junction and Storage Temperature Range | $T_j$ $T_{stg}$ | -40 +150 | |

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|---|---|---|---|---|---|---|
| Breakdown Reverse Voltage | $V_{BR}$ | $I_R$=1mA(Ta=25 ) | 100 | | | V |
| Forward Voltage | $V_F$ | $I_F$ =3A(Ta=25 ) | | 0.59 | | V |
| | | $I_F$ =5A(Ta=25 ) | | 0.69 | 0.75 | V |
| | | $I_F$ =3A(Ta=125 ) | | 0.53 | | V |
| | | $I_F$ =5A(Ta=125 ) | | 0.61 | 0.65 | V |
| Instantaneous Reverse Current | $I_R$ | $V_R$=100V(Ta=25 ) | | 5.0 | 50 | μA |
| | Note 1 | $V_R$=100V(Ta=125 ) | | 3.0 | 10 | mA |

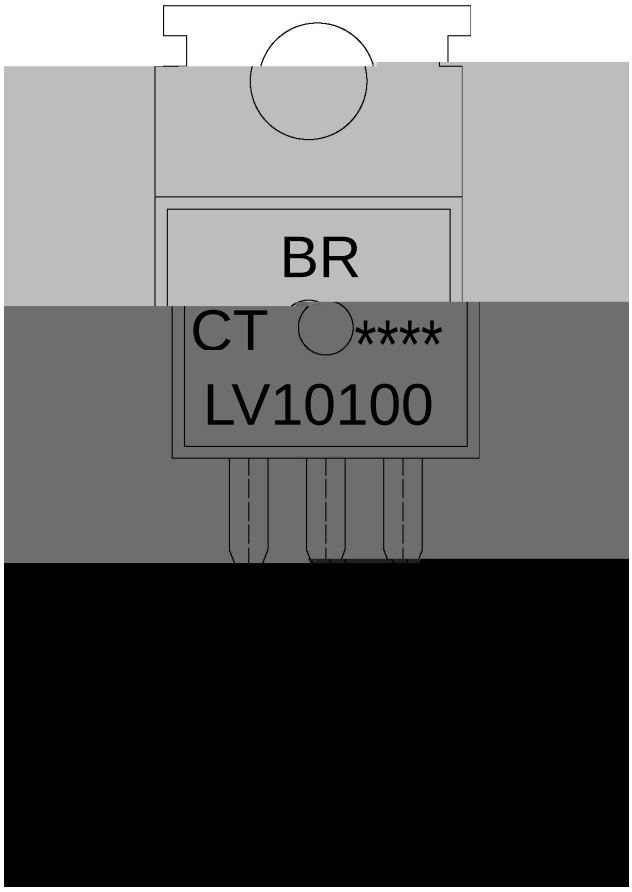
## / Electrical Characteristic Curve



## / Package Dimensions



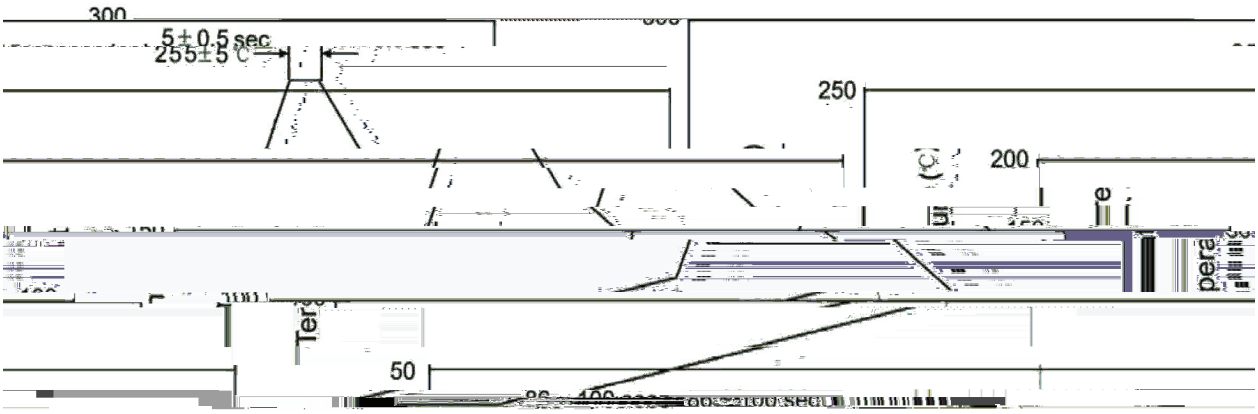
## / Marking Instructions




Note:

| | |
|---|---|
| BR: | Company Code |
| LV10100 | Product Type. |
| CT: | Internal Structure |
| ****: | Lot No. Code, code change with Lot No. |

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




| | | | |
|---|---|---|---|
| | | Note: | |
| 1 | 25 150 60 90sec; | 1.Preheating:25~150 , 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 | 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 | 50 | 20 | 1,000 | 5 | 5,000 | 532×31.4×5.5 | 555×164×50 | 575×290×180 |

## / Notices