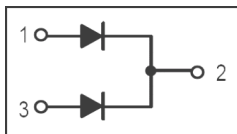


Schottky Barrier Diode in a TO-220 Plastic Package.

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

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



PIN1 Anode    PIN 2 Cathode    PIN 3 Anode

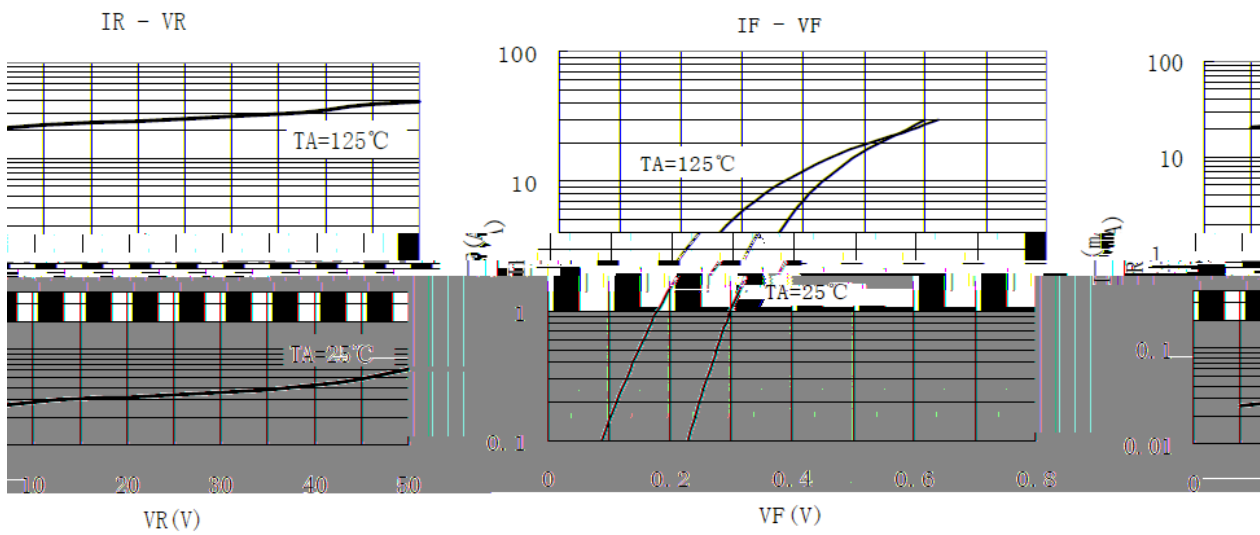
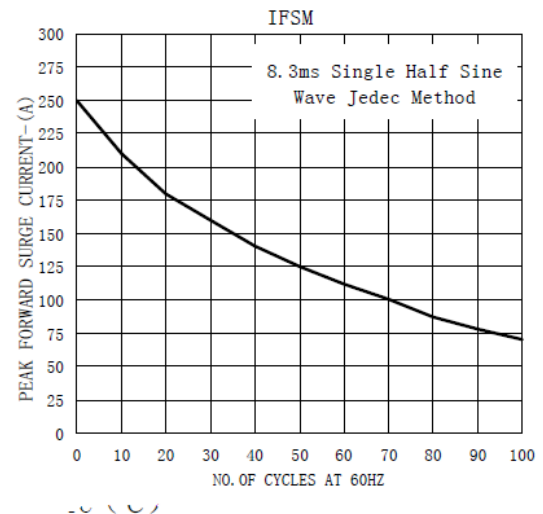
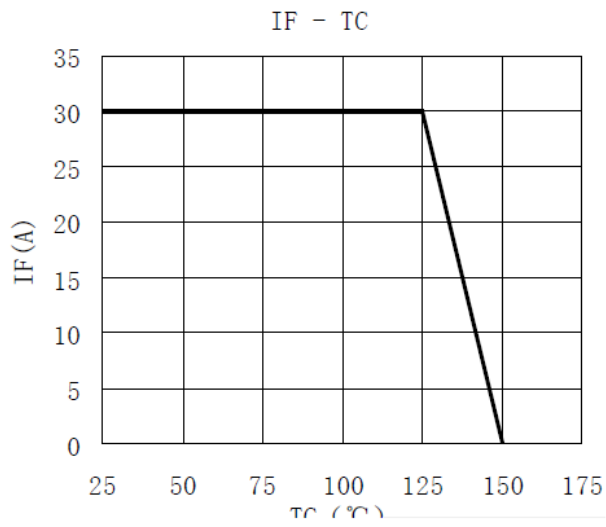
See Marking Instructions.

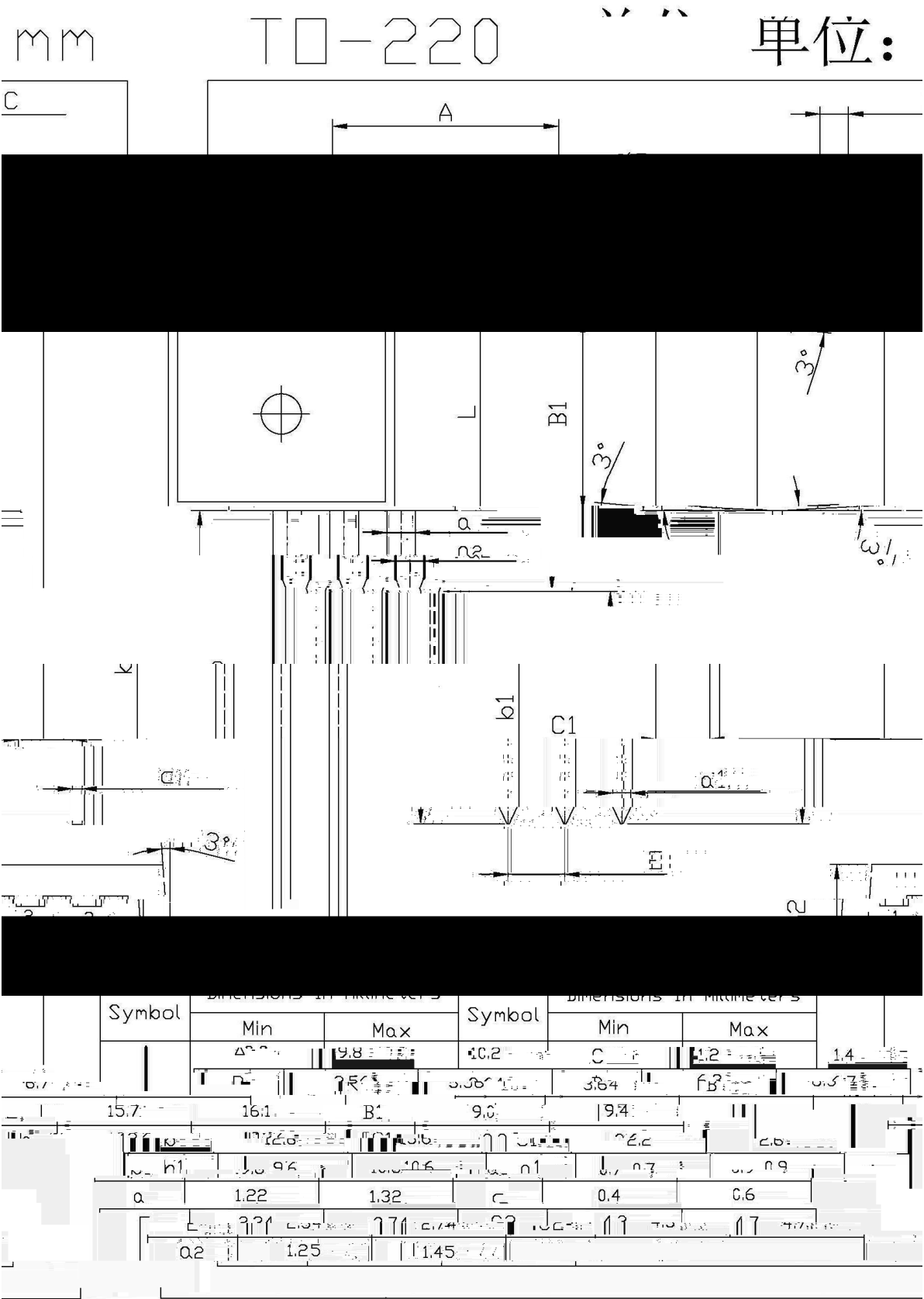
| Parameter                              | Symbol              | Rating          | Unit          |
|----------------------------------------|---------------------|-----------------|---------------|
| Peak Repetitive Reverse Voltage        | $V_{RRM}$           | 45              | V             |
| Average Rectified Output Current       | $I_{F(AV)}$         | $2 \times 15$   | A             |
| Non Repetitive Peak Surge Current      | $I_{FSM}$           | 250             | A             |
| Thermal Resistance Junction to Case    | $R_{\theta Jc}$     | 2.8             | $^{\circ}C/W$ |
| Junction and Storage Temperature Range | $T_j \quad T_{stg}$ | $-40 \sim +150$ | $^{\circ}C$   |

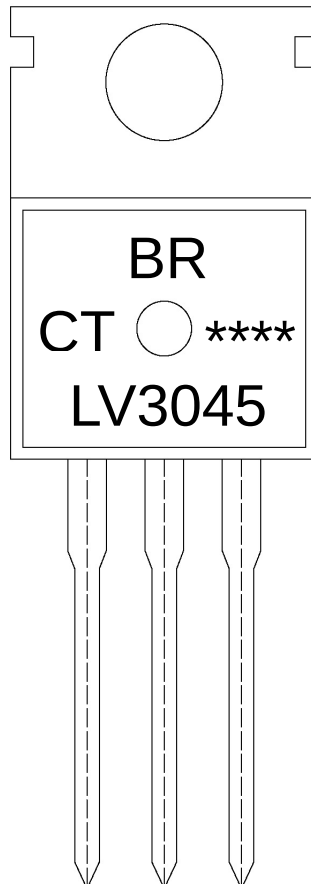
| Parameter                     | Symbol            | Test Conditions             | Min | Typ  | Max  | Unit    |
|-------------------------------|-------------------|-----------------------------|-----|------|------|---------|
| Breakdown Reverse Voltage     | $V_{BR}$          | $I_R=1mA(T_a=25^{\circ}C)$  | 45  |      |      | V       |
| Forward Voltage               | $V_F$             | $I_F=5A(T_a=25^{\circ}C)$   |     | 0.38 | 0.45 | V       |
|                               |                   | $I_F=15A(T_a=25^{\circ}C)$  |     | 0.48 | 0.55 | V       |
|                               |                   | $I_F=5A(T_a=125^{\circ}C)$  |     | 0.28 | 0.35 | V       |
|                               |                   | $I_F=15A(T_a=125^{\circ}C)$ |     | 0.45 | 0.50 | V       |
| Instantaneous Reverse Current | $I_R$<br>(Note 1) | $V_R=45V(T_a=25^{\circ}C)$  |     |      | 200  | $\mu A$ |
|                               |                   | $V_R=45V(T_a=125^{\circ}C)$ |     | 40   | 100  | mA      |

/Notes:

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







Note:

BR:

Company Code

LV3045

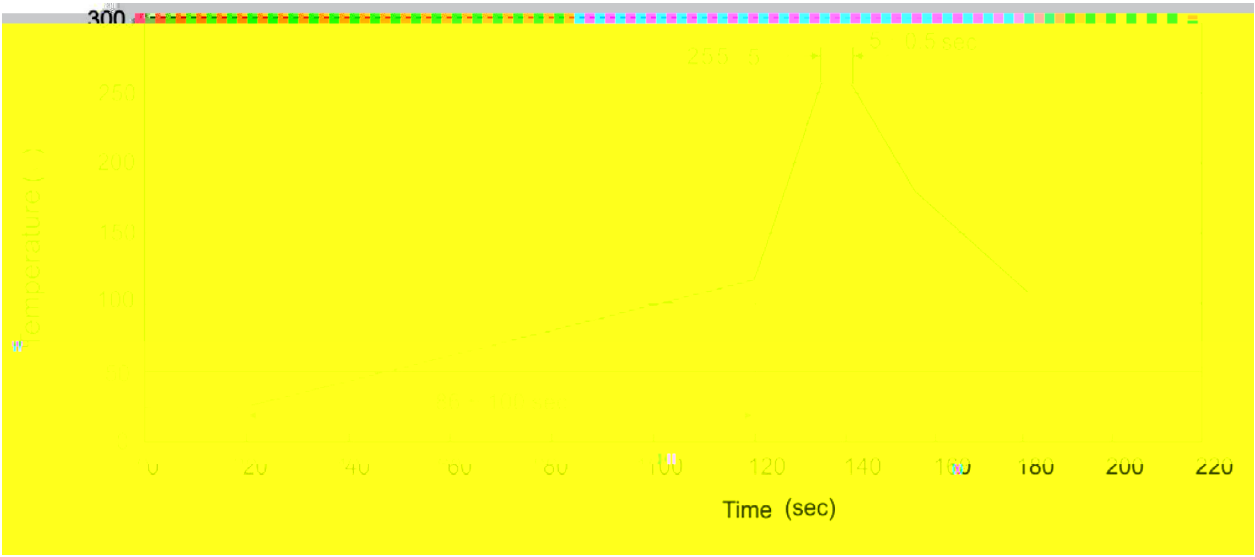
Product Type.

CT:

Internal Structure

\*\*\*\*:

Lot No. Code, code change with Lot No.



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.

270 5

10 1 sec.

Temp.:270±5

Time:10±1 sec

/ BULK

| Package Type | Units          |                     |                      |                            |                      | Dimension (unit mm <sup>3</sup> ) |             |             |
|--------------|----------------|---------------------|----------------------|----------------------------|----------------------|-----------------------------------|-------------|-------------|
|              | Units/Bag<br>/ | Bags/Inner Box<br>/ | Units/Inner Box<br>/ | Inner Boxes/Outer Box<br>/ | Units/Outer Box<br>/ | Bag                               | Inner Box   | Outer Box   |
| TO-220/F     | 200            | 10                  | 2,000                | 5                          | 10,000               | 135×190                           | 237×172×102 | 560×245×195 |