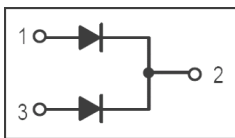


Schottky Barrier Diode in a TO-220F Plastic Package.

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

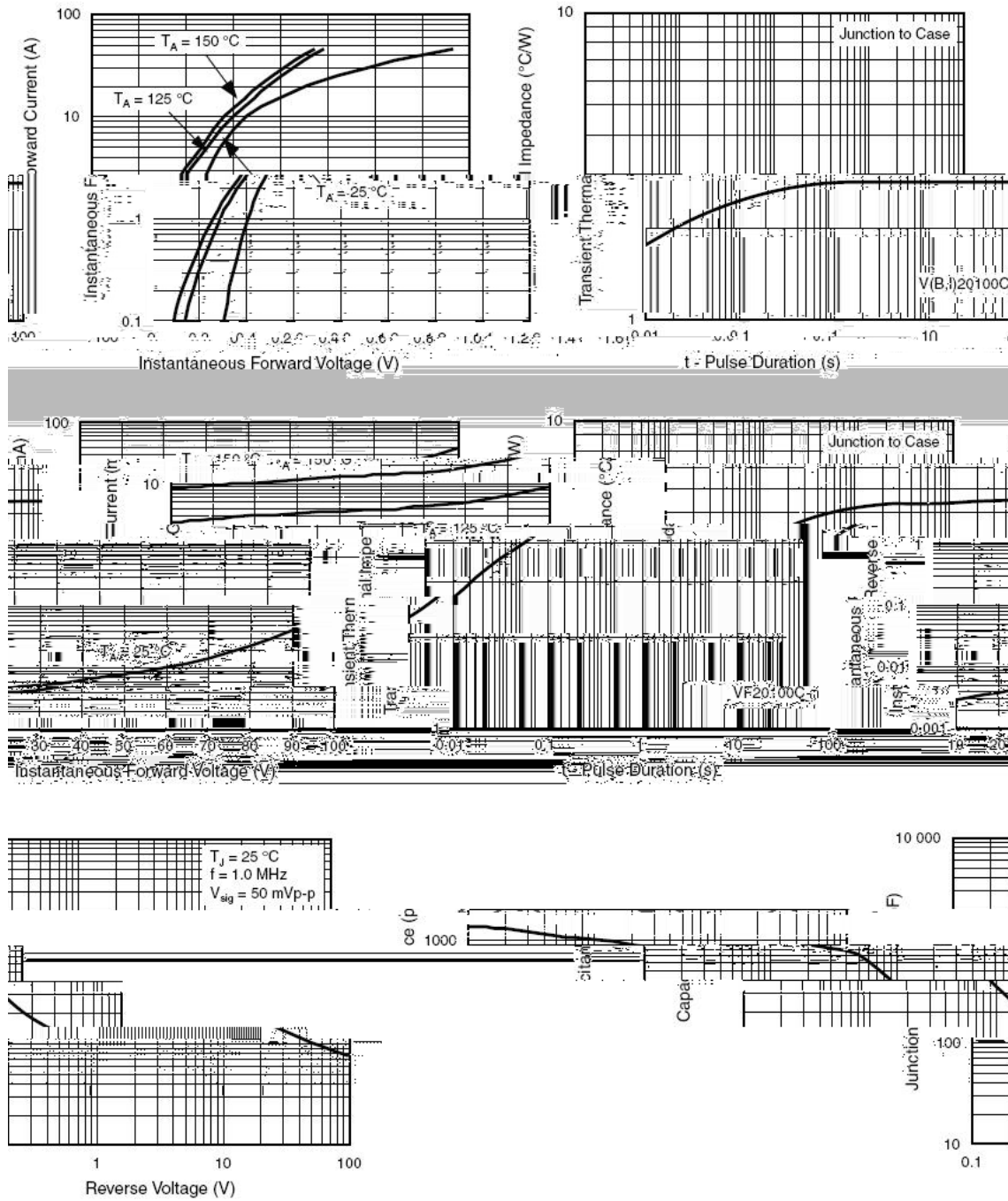
See Marking Instructions.

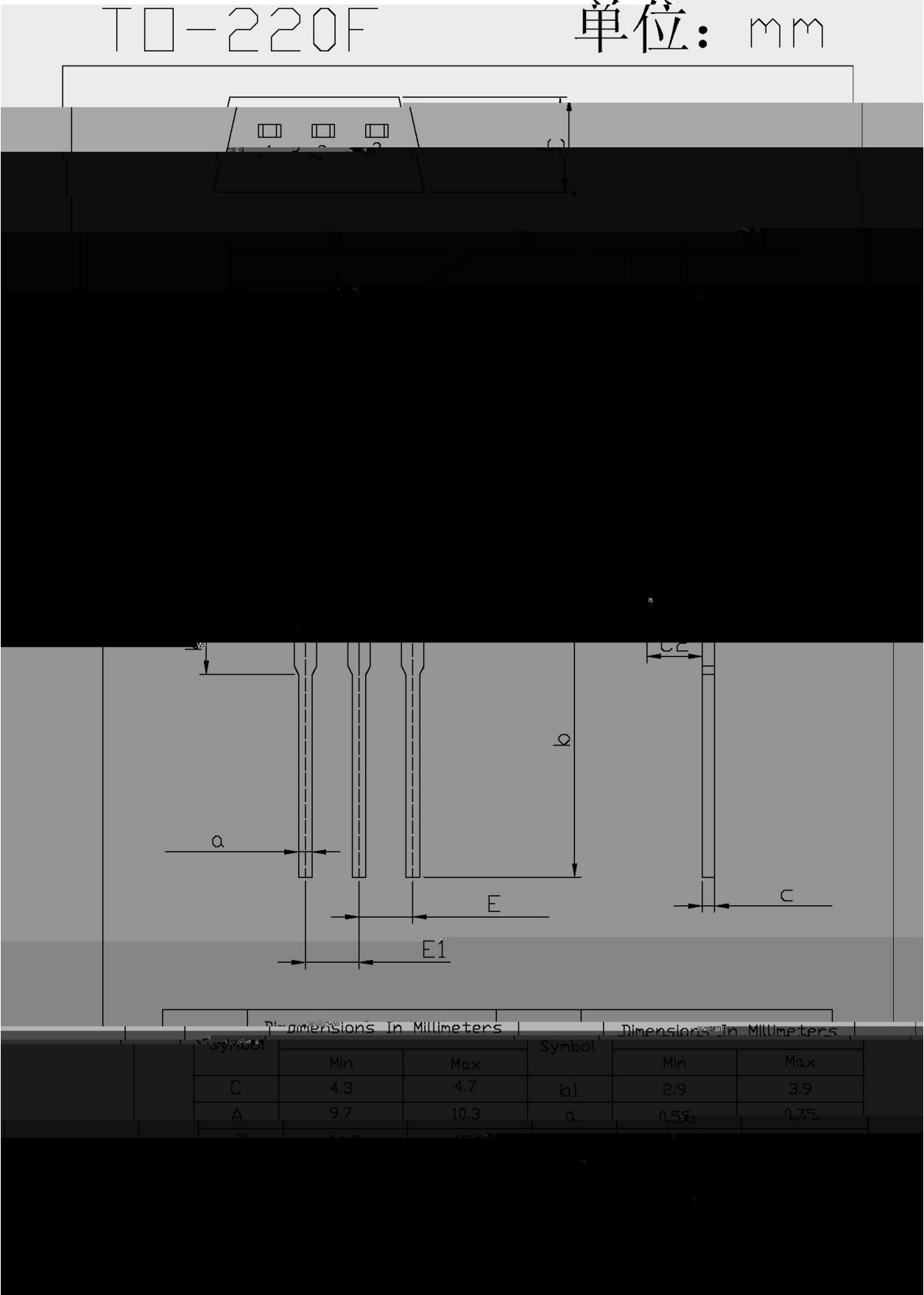
| Parameter                              | Symbol              | Rating        | Unit |
|----------------------------------------|---------------------|---------------|------|
| Peak Repetitive Reverse Voltage        | $V_{RM}$            | 100           | V    |
| Working Peak Reverse Voltage           | $V_{RSM}$           |               |      |
| Average Rectified Forward Current      | $I_{F(AV)}$         | $2 \times 15$ | A    |
| Non Repetitive Peak Surge Current      | $I_{FSM}$           | 150           | A    |
| Thermal Resistance Junction to Case    | $R_{\theta Jc}$     | 4.6           | /W   |
| Junction and Storage Temperature Range | $T_j \quad T_{stg}$ | -40~+150      |      |

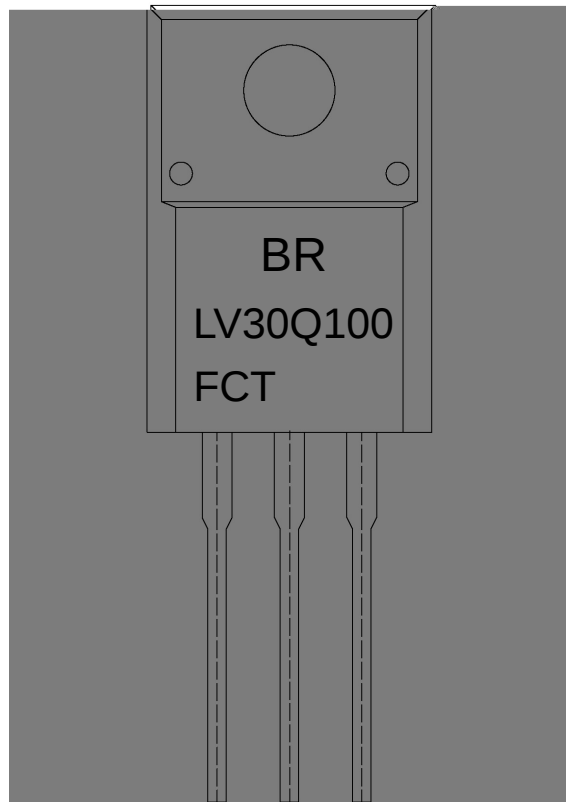
| Parameter                     | Symbol         | Test Conditions             | Min | Typ  | Max   | Unit    |
|-------------------------------|----------------|-----------------------------|-----|------|-------|---------|
| Breakdown Voltage             | $V_{BR}$       | $I_R=1mA(T_a=25^\circ C)$   | 100 |      |       | V       |
| Forward Voltage               | $V_F$          | $I_F=5A(T_a=25^\circ C)$    |     | 0.54 |       | V       |
|                               |                | $I_F=1A(T_a=25^\circ C)$    |     |      | 0.765 | V       |
|                               |                | $I_F=5A(T_a=125^\circ C)$   |     | 0.50 |       | V       |
|                               |                | $I_F=15A(T_a=125^\circ C)$  |     |      | 0.75  | V       |
| Instantaneous Reverse Current | $I_R$ (Note 1) | $V_R=100V(T_a=25^\circ C)$  |     |      | 150   | $\mu A$ |
|                               |                | $V_R=100V(T_a=125^\circ C)$ |     |      | 150   | mA      |

Short duration pulse test used to minimize self-heating effect.

Unless otherwise noted, values for the parameters of a single chip







Note:

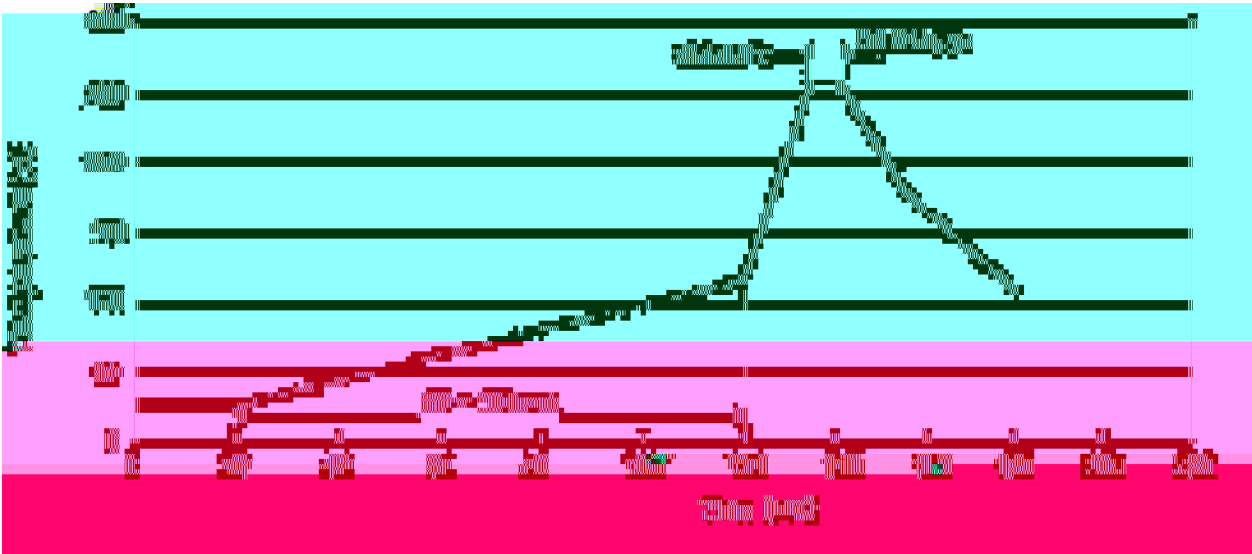
BR: Company Code

LV30Q100: Product Type.

CT: Internal Structure

F: Package Code

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



- Note:
1. Preheating: 25~150 , Time: 60~90sec.

2. Peak Temp.: 255 5 , Duration: 5 0.5sec.

3. Cooling Speed: 2~10 /sec.

- 1 25 150 60 90sec;
- 2 255 5 5 0.5sec;
- 3 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> ) |  |  |
|--------------|-------|--|--|--|--|-----------------------------------|--|--|
|              |       |  |  |  |  |                                   |  |  |
|              |       |  |  |  |  |                                   |  |  |

/ TUBE

| Package Type | Units |  |  |  |  | Dimension (unit mm <sup>3</sup> ) |  |  |
|--------------|-------|--|--|--|--|-----------------------------------|--|--|
|              |       |  |  |  |  |                                   |  |  |
|              |       |  |  |  |  |                                   |  |  |