

LV10200FCT

Rev.E Mar.-2016

/ Descriptions

TO-220F

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

/ Features

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

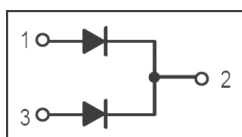
/ Applications

OR-ing

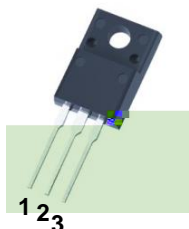
DC-DC

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.

/ Absolute Maximum Ratings(Ta=25)

| Parameter | Symbol | Rating | Unit |
|--|-----------------------------------|----------|------|
| Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage | V_{RM} V_{RSM} V_{DC} | 200 | V |
| RMS Voltage | V_{RMS} | 140 | V |
| Average Rectified Forward Current | $I_{F(AV)}$ | 2× 5 | A |
| Non Repetitive Peak Surge Current | I_{FSM} | 80 | A |
| Thermal Resistance Junction to Case | R_{Jc} | 4.5 | /W |
| Junction and Storage Temperature Range | T_j T_{stg} | -40 +150 | |

A Electrical Characterizations(Ta= 5

| Parameter | Symbol | Test Conditions | Min | Typ | Max | Unit |
|-------------------------------|--------------|---------------------|-----|------|------|---------|
| Breakdown Voltage | V_{BR} | $I_R=1mA(Ta=25)$ | 200 | | | V |
| Forward Voltage | V_F | $I_F=2.5A(Ta=25)$ | | 0.81 | 0.95 | V |
| | | $I_F=2.5A(Ta=125)$ | | 0.62 | 0.75 | V |
| | | $I_F=5A(Ta=25)$ | | 1.10 | 1.60 | V |
| | | $I_F=5A(Ta=125)$ | | 0.70 | 0.75 | V |
| Instantaneous Reverse Current | I_R Note 1 | $V_R=200V(Ta=25)$ | | | 50 | μA |
| | | $V_R=200V(Ta=125)$ | | 1.5 | 10 | mA |

/Notes

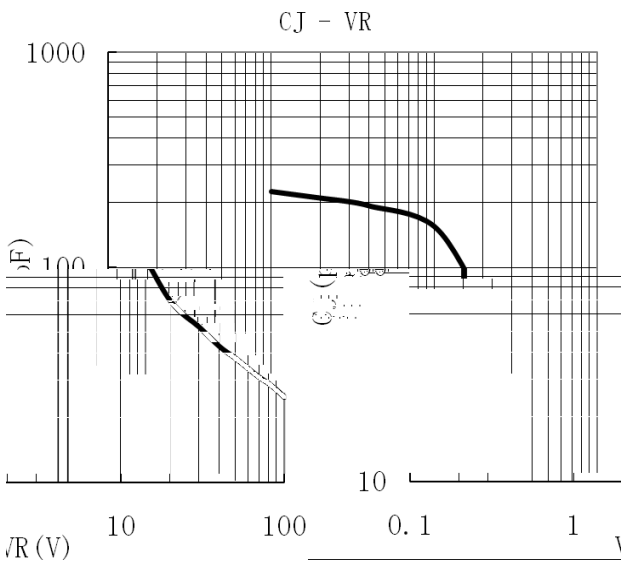
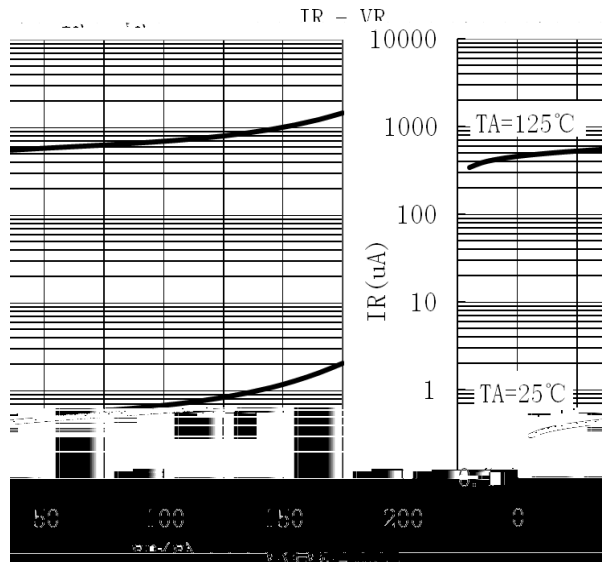
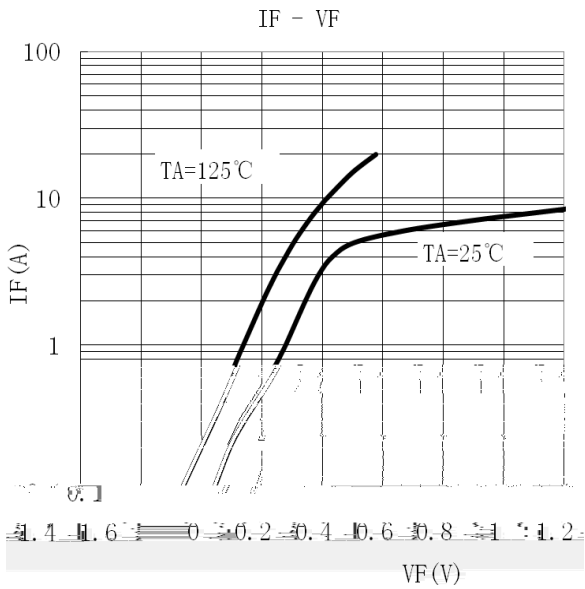
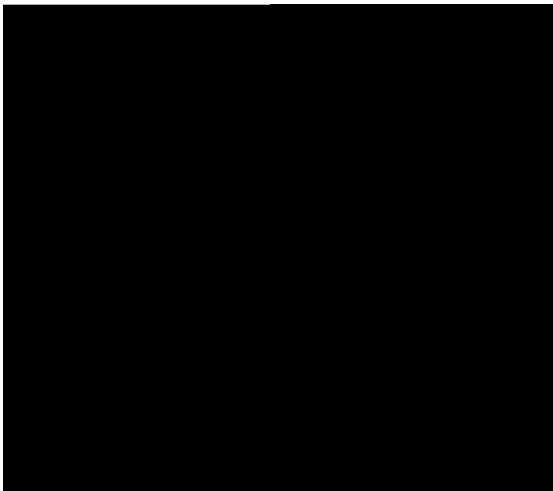
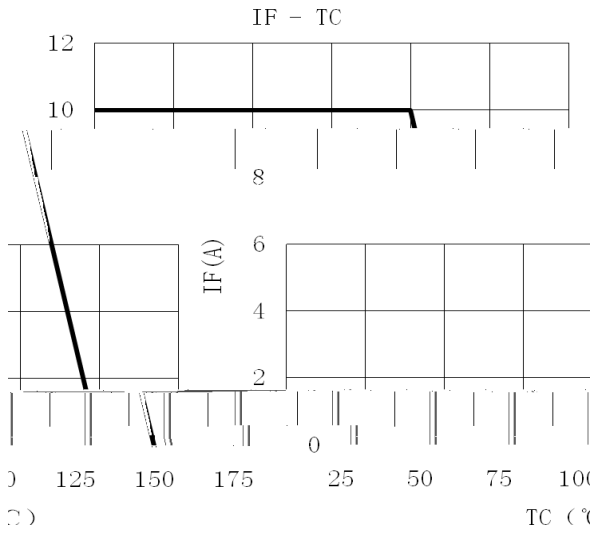
1.

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

2.

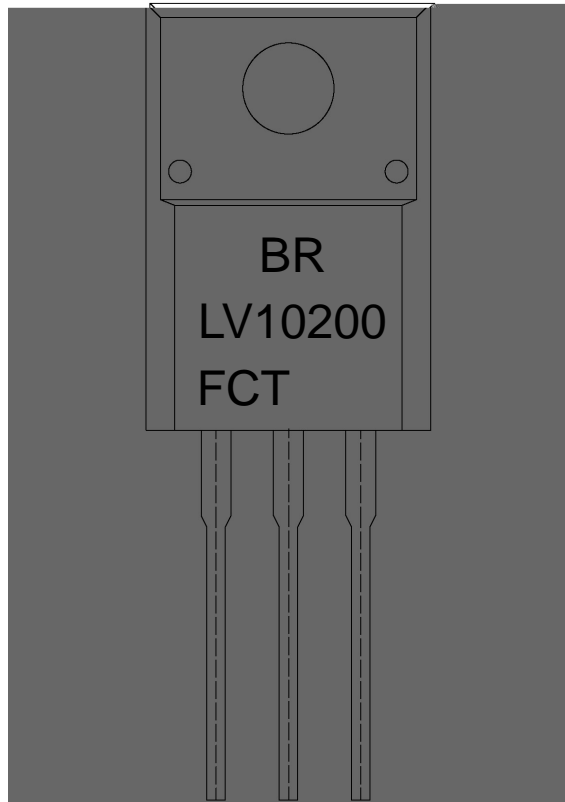
Unless otherwise noted, values for the parameters of a single chip

/ Electrical Characteristic Curve



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/ Marking Instructions



BR

LV10200

F:

CT:

Note:

BR: Company Code

LV10200: Product Type Code.

F Package Code

CT: Internal Structure

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

