

# MBR30100CT

Rev. A May.-2023



DATA SHEET

TO-220

Schottky Barrier Diode in a TO-220 Plastic Package.

/ Absolute Maximum Ratings(Ta=25 )

| Parameter                                 | Symbol             | Rating  | Unit |
|-------------------------------------------|--------------------|---------|------|
| Peak Repetitive Reverse Voltage           | $V_{RRM}$          | 100     | V    |
| RMS Voltage                               | $V_{RMS}$          | 70      | V    |
| DC Blocking Voltage                       | $V_{DC}$           | 100     | V    |
| Average Rectified Forward Current         | $I_{F(AV)}$        | 15      | A    |
|                                           | $I_{F(AV)(total)}$ | 30      | A    |
| Non-Repetitive Peak Forward Surge Current | $I_{FSM}$          | 200     | A    |
| Peak Repetitive Forward Current           | $I_{FRM}$          | 30      | A    |
| Repetitive Peak Reverse Surge Current     | $I_{RRM}$          | 0.5     | A    |
| Thermal Resistance Junction to Case       | $R_{\theta Jc}$    | 1.2     | /W   |
| Junction Temperature Range                | $T_j$              | -55 175 |      |
| Storage Temperature Range                 | $T_{stg}$          | -55 175 |      |

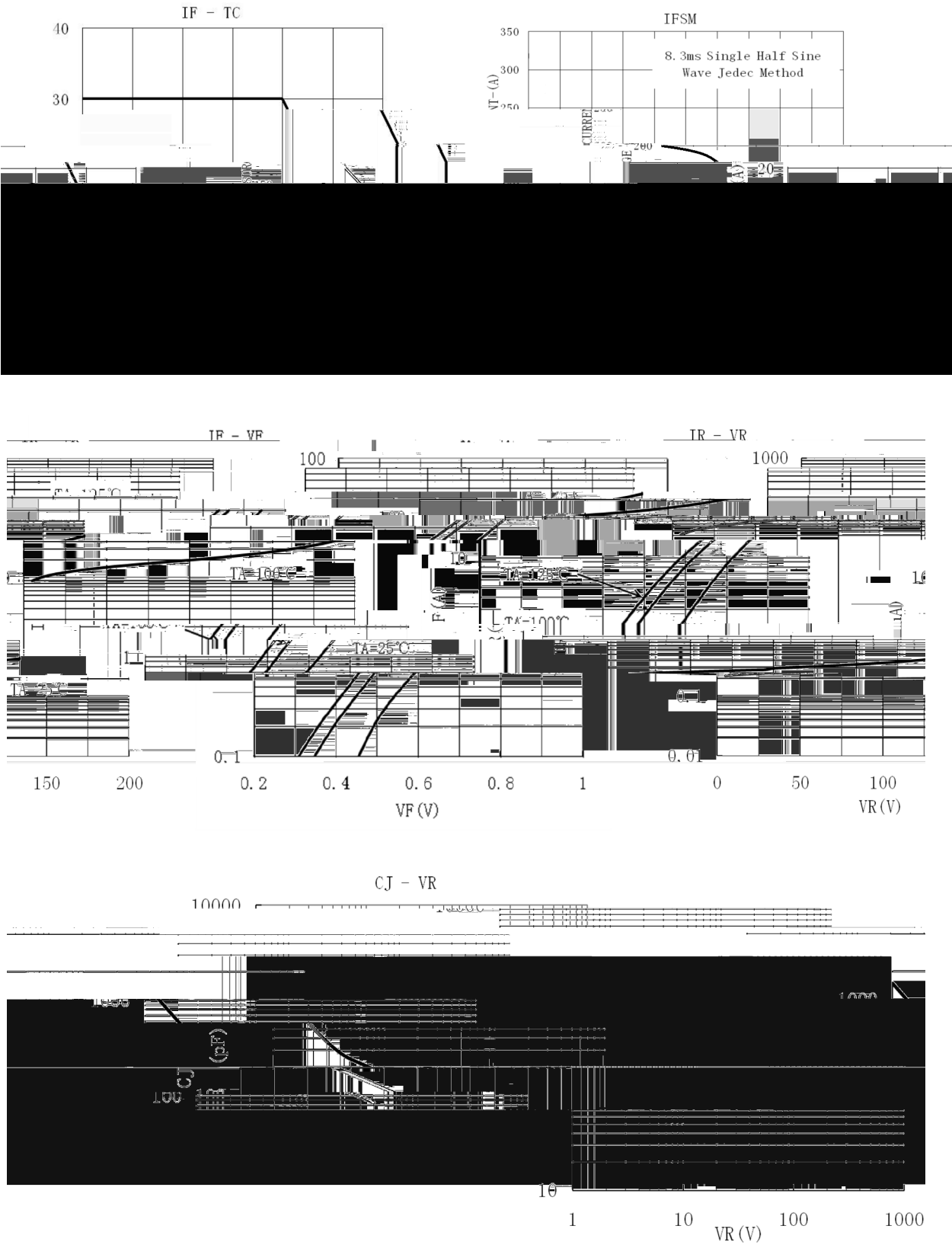
/ Electrical Characteristics(Ta=25 )

| Parameter                     | Symbol | Test Conditions    | Min | Typ | Max  | Unit |
|-------------------------------|--------|--------------------|-----|-----|------|------|
| Forward Voltage               | $V_F$  | $I_F=15A(T_j=25)$  |     |     | 0.91 | V    |
|                               |        | $I_F=15A(T_j=125)$ |     |     | 0.75 | V    |
|                               |        | $I_F=30A(T_j=25)$  |     |     | 1.05 | V    |
|                               |        | $I_F=30A(T_j=125)$ |     |     | 0.89 | V    |
| Instantaneous Reverse Current | $I_R$  | $T_C=25$           |     |     | 0.05 | mA   |
|                               |        | $T_C=125$          |     |     | 20   | 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

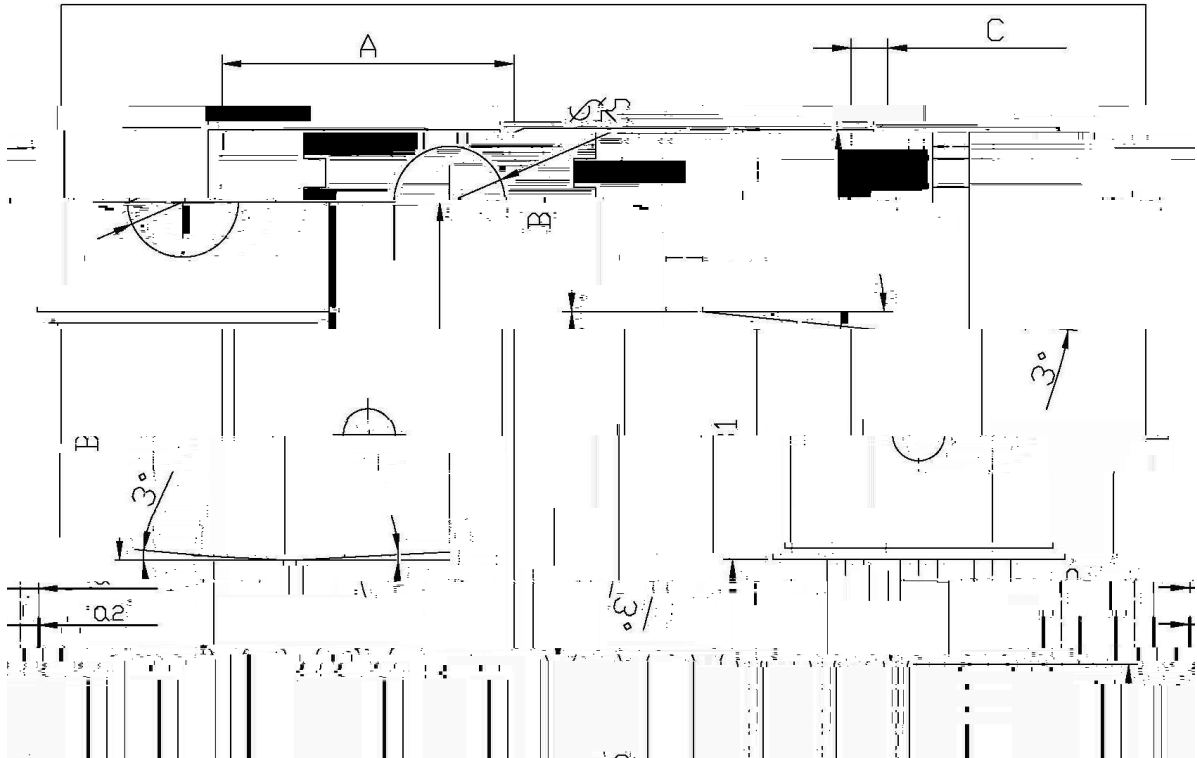
/ Electrical Characteristic Curve



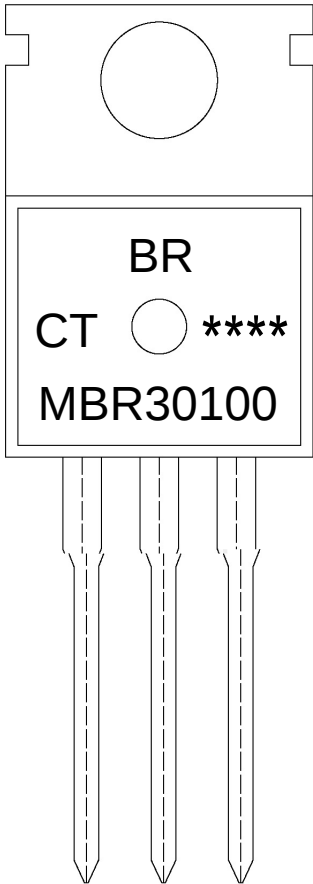
/ Package Dimensions

TO-220

单位: mm



/ Marking Instructions



BR

MBR30100

CT:

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Note:

BR: Company Code

MBR30100 Product Type

CT: Internal Structure

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

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