

# MBRB10100CT

Rev.F May.-2016

## / Descriptions

TO-263

Schottky Diode in a TO-263 Plastic Package.

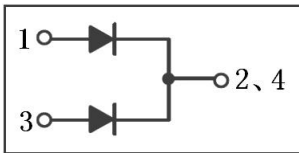
## / Features

Low power loss, high efficiency.

## / Applications

For use in low voltage,high frequency inverters, free wheeling, and polarity protection applications.

## / Equivalent Circuit



## / Pinning



PIN1 Anode

PIN 2 4 Cathode

PIN 3 Anode

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

See Marking Instructions.

/ Absolute Maximum Ratings(Ta=25 )

| Parameter                                                                             | Symbol                             | Rating  | Unit |
|---------------------------------------------------------------------------------------|------------------------------------|---------|------|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Reverse Voltage | $V_{RRM}$<br>$V_{RWM}$<br>$V_{RM}$ | 100     | V    |
| RMS Reverse Voltage                                                                   | $V_{R(RMS)}$                       | 70      | V    |
| Average forward rectified Current                                                     | $I_F$                              | 2X5     | A    |
| Non Repetitive Peak Surge Current                                                     | $I_{FSM}$                          | 125     | A    |
| Thermal Resistance Junction to Case                                                   | $R_{\theta Jc}$                    | 2.5     | /W   |
| Junction Temperature Range                                                            | $T_j$                              | 150     |      |
| Storage Temperature Range                                                             | $T_{stg}$                          | -55 150 |      |

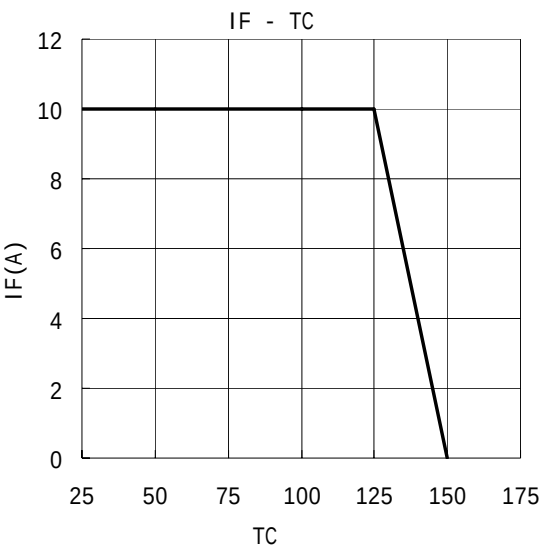
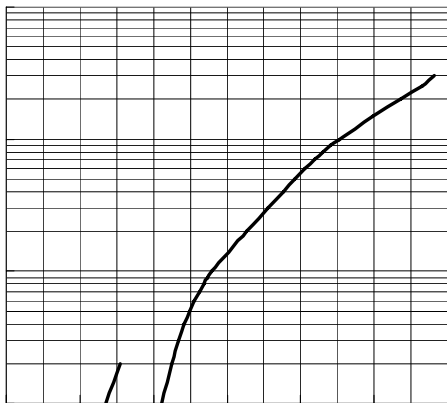
/ Electrical Characteristics(Ta=25 )

| Parameter                     | Symbol          | Test Conditions      | Min | Typ | Max  | Unit |
|-------------------------------|-----------------|----------------------|-----|-----|------|------|
| Reverse Voltage               | $V_R$           | $I_R=0.3mA$          | 100 |     |      | V    |
| Forward Voltage               | $V_{FM}$        | $I_F=5.0A$ $T_j=25$  |     |     | 0.85 | V    |
|                               |                 | $I_F=5.0A$ $T_j=125$ |     |     | 0.75 | V    |
|                               |                 | $I_F=10A$ $T_j=25$   |     |     | 0.95 | V    |
|                               |                 | $I_F=10A$ $T_j=125$  |     |     | 0.85 | V    |
| Instantaneous Reverse Current | $I_R$<br>Note 1 | $V_R=100V$ $T_j=25$  |     |     | 10   | uA   |
|                               |                 | $V_R=70V$ $T_j=125$  |     |     | 1    | mA   |
|                               |                 | $V_R=100V$ $T_j=125$ |     |     | 5    | mA   |

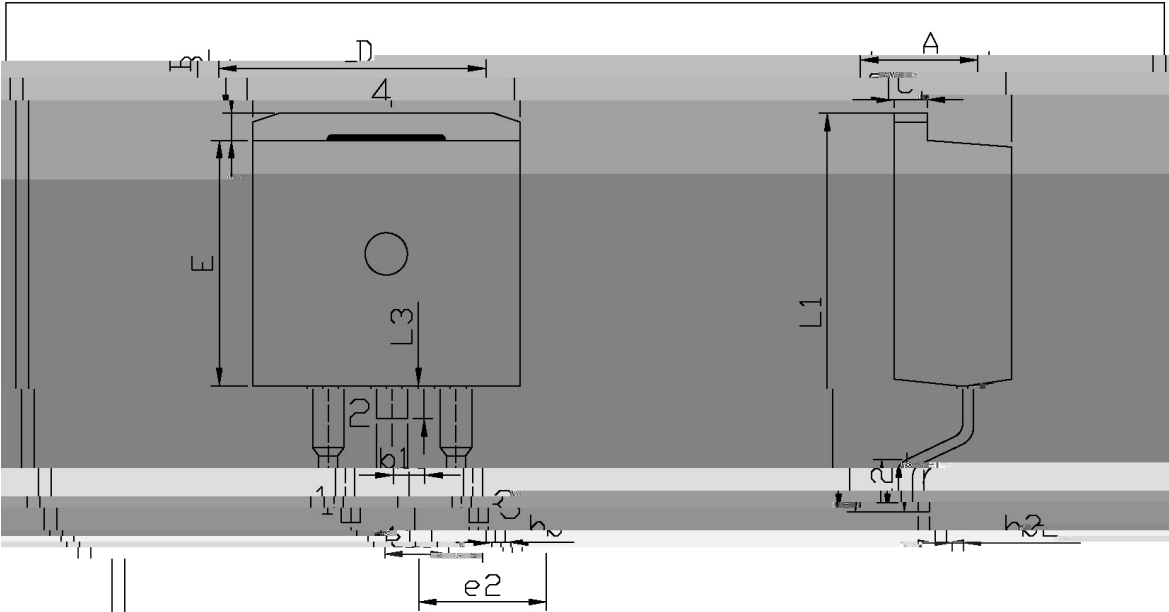
/Notes

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



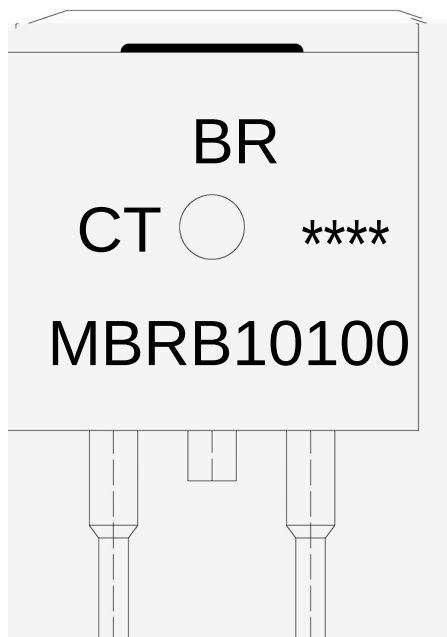
/ Package Dimensions



单位: mm

| Dimensions | Dimensions In Millimeters | Dimensions In Millimeters | Dimensions In Millimeters |
|------------|---------------------------|---------------------------|---------------------------|
| Max        | Min                       | Max                       | Min                       |
| 9.40       | A 4.30                    | 4.70                      | E 9.00                    |
|            | B 4.00                    | 4.40                      |                           |

## / Marking Instructions



BR

MBRB10100

CT:

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Note:

BR:

Company Code

MBRB10100

Product Type.

CT:

Internal Structure

\*\*\*\*:

Lot No. Code, code change with Lot No.

