

**/ Descriptions**

TO-263

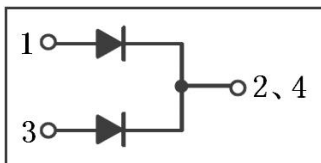
Schottky Diode in a TO-263 Plastic Package.

**/ 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<sub>FE</sub> Classifications & Marking**

See Marking Instructions.

**/ Absolute Maximum Ratings(Ta=25 )**

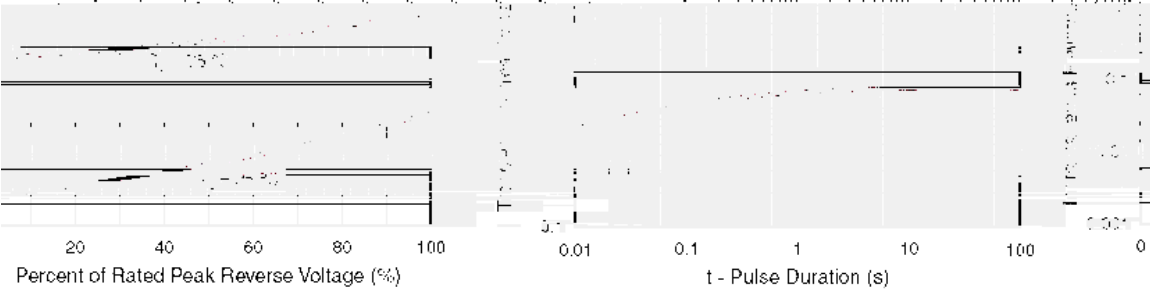
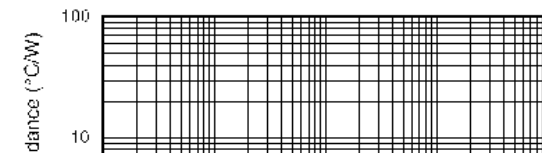
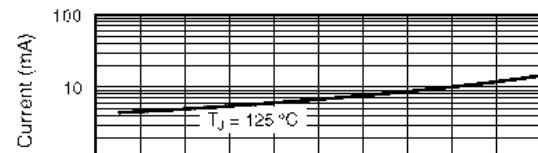
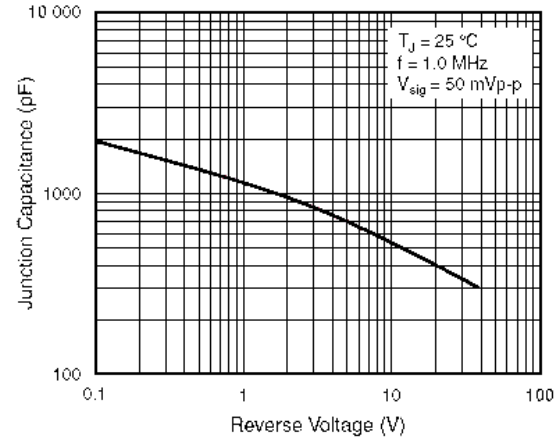
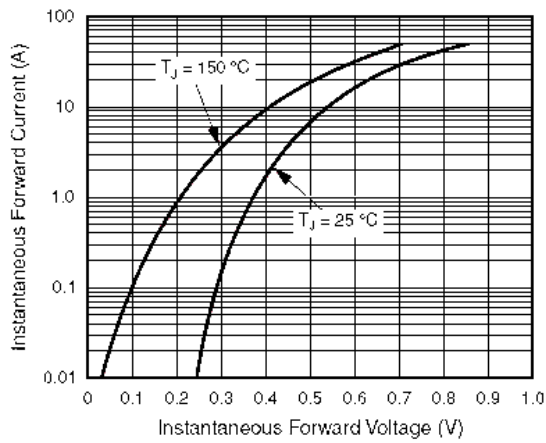
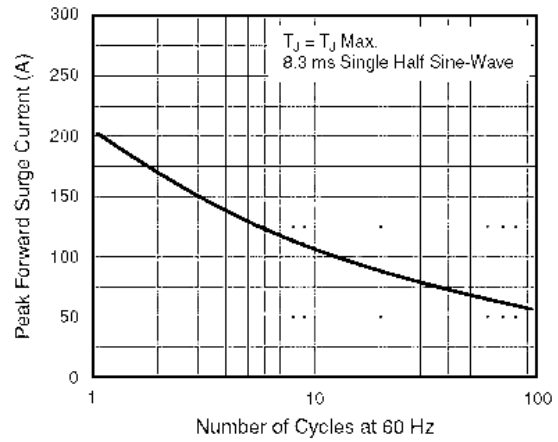
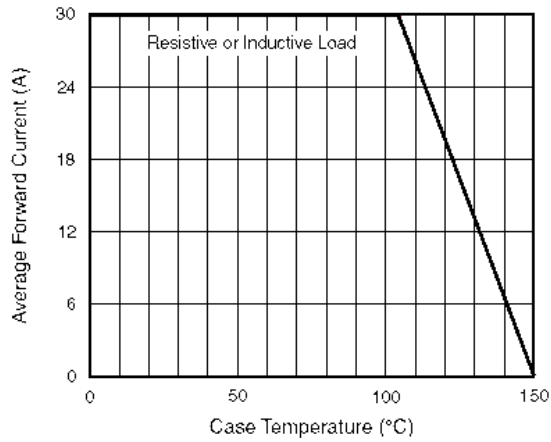
| Parameter                                 | Symbol                   | Rating  | Unit |
|-------------------------------------------|--------------------------|---------|------|
| Peak Repetitive Reverse Voltage           | $V_{RRM}$                | 45      | V    |
| Peak Repetitive Forward Current           | $I_{F(AV)}$              | 15      | A    |
|                                           | $I_{F(AV)}$ total device | 30      | A    |
| Non-Repetitive Peak Forward Surge Current | $I_{FSM}$                | 200     | A    |
| Repetitive Peak Reverse Surge Current     | $I_{RRM}$                | 2.0     | A    |
| Thermal Resistance Junction to Case       | $R_{\theta JC}$          | 1.5     | /W   |
| Junction Temperature Range                | $T_j$                    | 150     |      |
| Storage Temperature Range                 | $T_{stg}$                | -65 150 |      |

**/ Electrical Characteristics(Ta=25 )**

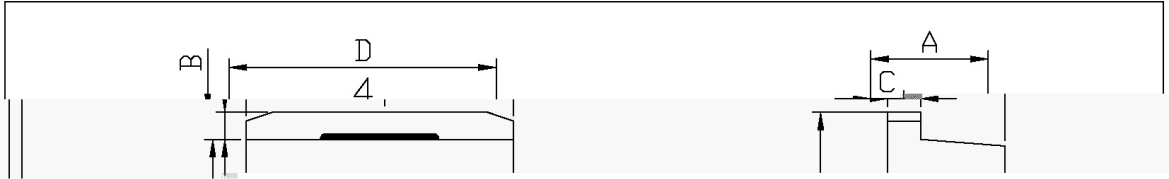
| Parameter                     | Symbol | Test Conditions     | Min | Typ | Max   | Unit       |
|-------------------------------|--------|---------------------|-----|-----|-------|------------|
| Forward Voltage               | $V_F$  | $I_F=30A(T_c=25 )$  |     |     | 0.76  | V          |
|                               |        | $I_F=20A(T_c=125 )$ |     |     | 0.60  | V          |
|                               |        | $I_F=30A(T_c=125 )$ |     |     | 0.72  | V          |
| Instantaneous Reverse Current | $I_R$  | $T_j=25$            |     |     | 1.0   | mA         |
|                               |        | $T_j=125$           |     |     | 60    | mA         |
| Voltage Rate of Change        | dv/dt  |                     |     |     | 10000 | V/ $\mu$ s |



/ Electrical Characteristic Curve



/ Package Dimensions

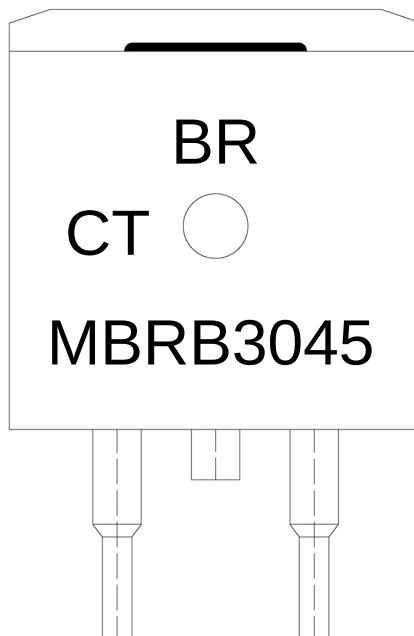


单位: mm

| Symbol | Dimensions In Millimeters |       | Symbol | Dimensions In Millimeters |       |
|--------|---------------------------|-------|--------|---------------------------|-------|
|        | Min                       | Max   |        | Min                       | Max   |
| A      | 4.30                      | 4.70  | E      | 9.00                      | 9.40  |
| B      | 1.00                      | 1.40  | e1     | 2.34                      | 2.74  |
| b      | 0.70                      | 0.90  | e2     | 4.88                      | 5.28  |
| b1     | 1.15                      | 1.35  | L1     | 15.00                     | 16.00 |
| b2     | 0.40                      | 0.60  | L2     | 2.24                      | 2.54  |
| C      | 1.20                      | 1.40  | L3     | 1.20                      | 1.40  |
| D      | 9.80                      | 10.20 |        |                           |       |

TP-263

/ Marking Instructions



BR

MBRB3045

CT:

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Note:

BR: Company Code

MBRB3045 Product Type.

CT: Internal Structure

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

