



- High frequency operation
- High purity, high temperature epoxy encapsulation for enhanced mechanical strength and moisture resistance
- Guard ring for enhanced ruggedness and long term reliability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

Typical applications are in switching power supplies, converters, freewheeling diodes, and reverse battery protection.

- : TO-220AC  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- : Tin plated leads, solderable per J-STD-002 and JESD22-B102
- : As marked

■ (T<sub>a</sub>=25 Unless otherwise specified)

| Device marking code                                                                       |                  |                  | MBR10300   |
|-------------------------------------------------------------------------------------------|------------------|------------------|------------|
| Repetitive Peak Reverse Voltage                                                           | VRRM             | V                | 300        |
| Average Rectified Output Current<br>@60Hz sine wave, R-load, T <sub>a</sub> =25           | I <sub>O</sub>   | A                | 10         |
| Surge(Non-repetitive)Forward Current<br>@60Hz half sine-wave, 1 cycle, T <sub>a</sub> =25 | IFSM             | A                | 200        |
| Current Squared Time @1ms≤t<8.3ms T <sub>j</sub> =25                                      | I <sup>2</sup> t | A <sup>2</sup> s | 167        |
| Storage Temperature                                                                       | T <sub>stg</sub> |                  | -55 ~ +150 |



|                                    |                           |       |   |     |
|------------------------------------|---------------------------|-------|---|-----|
| ■ Ta=25 Unless otherwise specified |                           |       |   |     |
|                                    |                           |       |   |     |
| Thermal Resistance                 | Between junction and case | RθJ-C | W | 2.0 |

|             |                 |  |  |  |  |
|-------------|-----------------|--|--|--|--|
| ■ (Example) |                 |  |  |  |  |
|             |                 |  |  |  |  |
| MBR10300    | Approximate 1.8 |  |  |  |  |



