

# Schottky Barrier Rectifier

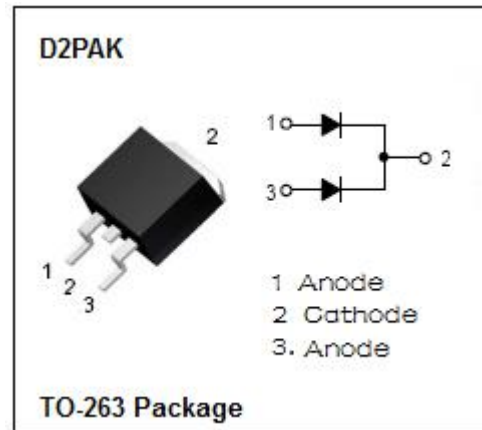
# MBR20100CD

### FEATURES

- Plastic material used carriers Underwriter Laboratory
- Metal silicon junction, majority carrier conduction
- Low Power Loss,high Efficiency
- Guard ring for overvoltage protection
- High Surge Capability,High Current Capability
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

### APPLICATIONS

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



### ABSOLUTE MAXIMUM RATINGS(Ta=25°C)

| SYMBOL                             | PARAMETER   | VALUE   | UNIT |
|------------------------------------|---|---------|------|
| V <sub>RRM</sub><br>V <sub>R</sub> | Peak Repetitive Reverse Voltage<br>DC Blocking Voltage  | 100     | V    |
| I <sub>F(AV)</sub>                 | Average Rectified Forward Current   | 20      | A    |
| I <sub>FSM</sub>                   | Nonrepetitive Peak Surge Current<br>8.3ms single half sine-wave superimposed on rated load conditions | 240*2   | A    |
| T <sub>J</sub>                     | Max.Junction Temperature  | 150     | °C   |
| T <sub>stg</sub>                   | Storage Temperature Range   | -40~150 | °C   |

### THERMAL CHARACTERISTICS

| SYMBOL              | PARAMETER                           | MAX | UNIT |
|---------------------|-------------------------------------|-----|------|
| R <sub>th j-c</sub> | Thermal Resistance,Junction to Case | 2   | °C/W |

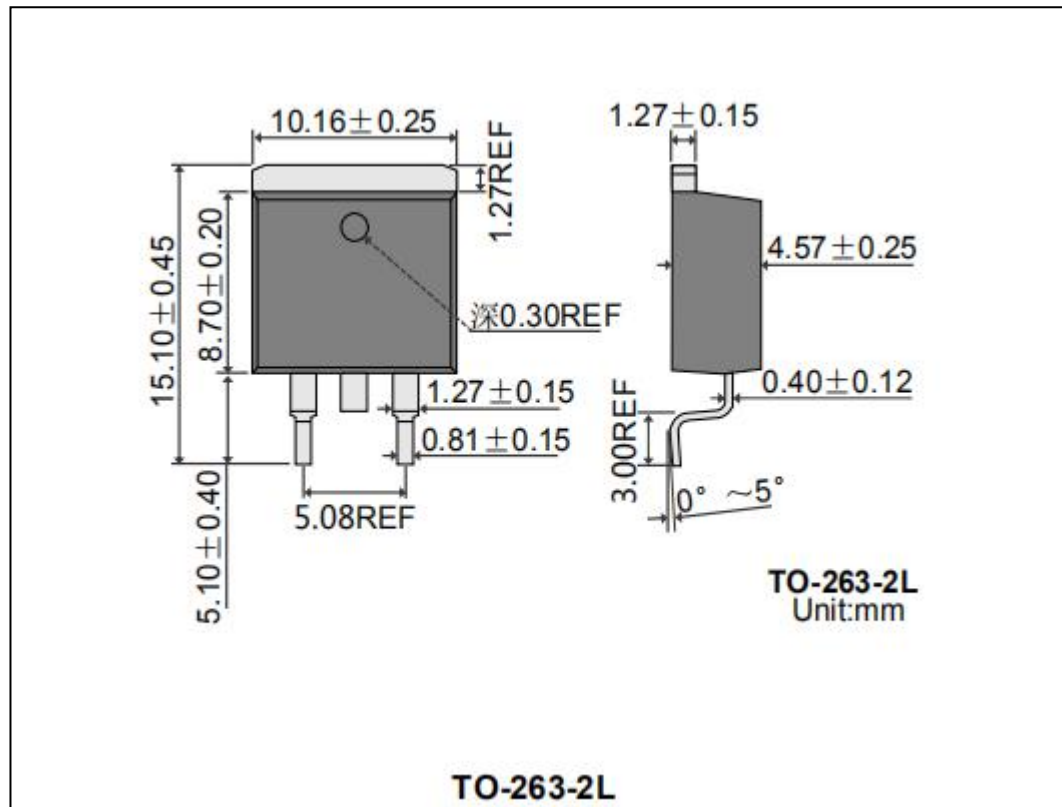
### ELECTRICAL CHARACTERISTICS

| SYMBOL         | PARAMETER                             | CONDITIONS                                    | MAX  | UNIT |
|----------------|---------------------------------------|---|------|------|
| V <sub>F</sub> | Maximum Instantaneous Forward Voltage | I <sub>F</sub> = 10A ; T <sub>c</sub> = 25°C  | 0.85 | V    |
|                |                                       | I <sub>F</sub> = 10A ; T <sub>c</sub> = 125°C | 0.72 |      |
| I <sub>R</sub> | Maximum Instantaneous Reverse Current | V <sub>R</sub> = 100V;T <sub>c</sub> = 25°C   | 0.01 | mA   |
|                |                                       | V <sub>R</sub> = 100V;T <sub>c</sub> = 125°C  | 10   |      |

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## PACKAGE OUTLINE DIMENSIONS

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