

# Schottky Barrier Rectifier

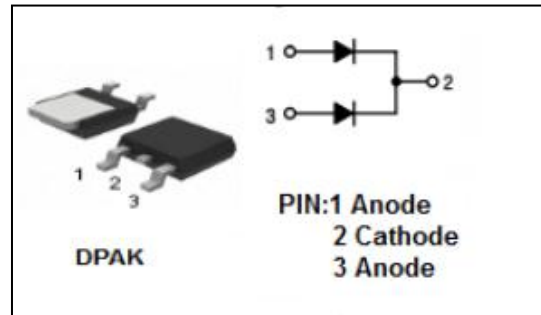
# MBR20150CD

## FEATURES

- Multilayer Metal -Silicon Potential Structure.
- Low Leakage Current.
- High Current Capability, High Efficiency.
- High Junction Temperature 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>   | Peak Repetitive Reverse Voltage   | 150     | 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 | 290*2   | A    |
| T <sub>J</sub>     | Junction Temperature  | 150     | °C   |
| T <sub>stg</sub>   | Storage Temperature Range   | -40~150 | °C   |

## THERMAL CHARACTERISTICS

| SYMBOL             | PARAMETER                           | MAX | UNIT |
|--------------------|-------------------------------------|-----|------|
| R <sub>thj-c</sub> | Thermal Resistance,Junction to Case | 3.0 | °C/W |

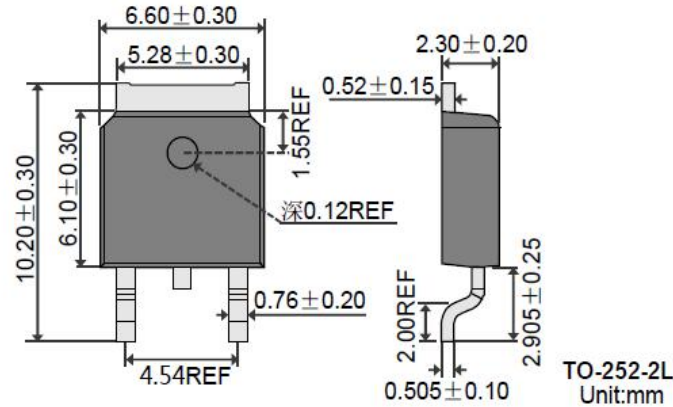
## ELECTRICAL CHARACTERISTICS (Pulse Test: Pulse Width=300 μ s,Duty Cycle≤1%)

| SYMBOL         | PARAMETER                             | CONDITIONS                                    | MAX  | UNIT |
|----------------|---------------------------------------|---|------|------|
| V <sub>F</sub> | Maximum Instantaneous Forward Voltage | I <sub>F</sub> = 10A ; T <sub>c</sub> = 25°C  | 0.9  | V    |
|                |                                       | I <sub>F</sub> = 10A ; T <sub>c</sub> = 125°C | 0.78 |      |
| I <sub>R</sub> | Maximum Instantaneous Reverse Current | V <sub>R</sub> = 150V; T <sub>c</sub> = 25°C  | 0.01 | mA   |
|                |                                       | V <sub>R</sub> = 150V; T <sub>c</sub> = 125°C | 10   |      |

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## PACKAGE OUTLINE DIMENSIONS



TO-252-2L

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