

# Schottky Barrier Rectifier

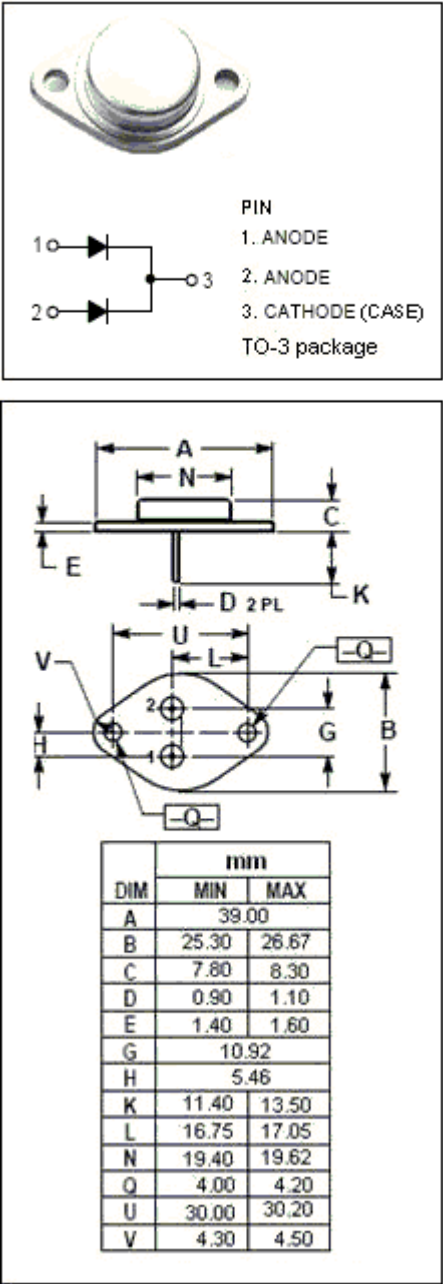
MBR3045

## FEATURES

- Dual Rectifier Conduction, Positive Center Tap
- Low Power Loss/High Efficiency
- High Current Capability
- High Surge Capacity
- Guarding for Overvoltage protection
- For Use in Low Voltage, High Frequency Inverters, Free Wheeling, and Polarity Protection Applications

## ABSOLUTE MAXIMUM RATINGS(T<sub>a</sub>=25°C)

| SYMBOL             | PARAMETER                                                                                                | VALUE   | UNIT |
|--------------------|----------------------------------------------------------------------------------------------------------|---------|------|
| V <sub>RRM</sub>   | DC Blocking Voltage                                                                                      | 45      | V    |
| I <sub>F(AV)</sub> | Average Rectified Forward Current<br>T <sub>C</sub> = 105°C                                              | 30      | A    |
| I <sub>FSM</sub>   | Nonrepetitive Peak Surge Current<br>8.3ms single half sine-wave superimposed<br>on rated load conditions | 275     | A    |
| T <sub>J</sub>     | Junction Temperature                                                                                     | 170     | °C   |
| T <sub>stg</sub>   | Storage Temperature Range                                                                                | -55~170 | °C   |



## ELECTRICAL CHARACTERISTICS(Pulse Test: Pulse Width≤300 μ s,Duty Cycle≤2%)

| SYMBOL         | PARAMETER                             | CONDITIONS                                   | MAX  | UNIT |
|----------------|---------------------------------------|----------------------------------------------|------|------|
| V <sub>F</sub> | Maximum Instantaneous Forward Voltage | I <sub>F</sub> = 15A ; T <sub>C</sub> = 25°C | 0.69 | V    |
| I <sub>R</sub> | Maximum Instantaneous Reverse Current | V <sub>R</sub> = 45V, T <sub>C</sub> = 25°C  | 20   | μ A  |