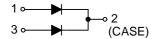
MBR2045C

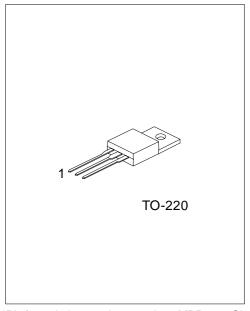
# SCHOTTKY BARRIER RECTIFIER DIODES

## **■ FEATURES**

- \* Guard Ring for Transient Protection
- \* Low Power Loss, High Efficiency
- \* High Surge Capability
- \* High Current Capability and Low Forward Voltage Drop

## ■ SYMBOL



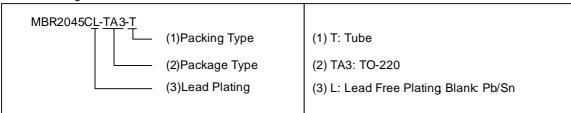


\*Pb-free plating product number: MBR2045CL

### ORDERING INFORMATION

|   | Order Number   |                   | Dookogo | Pin Assignment |   |   | Dooking |
|---|----------------|-------------------|---------|----------------|---|---|---------|
| Ī | Normal         | Lead Free Plating | Package | 1              | 2 | 3 | Packing |
| Ī | MBR2045C-TA3-T | MBR2045CL-TA3-T   | TO-220  | Α              | K | Α | Tube    |

Note: Pin Assignment: A: Anode K: Cathode



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## ■ ELECTRICAL CHARACTERISTICS RATINGS (Ta=25 , unless otherwise specified)

| PARAME   | TER                                      | SYMBOL                                | RATINGS    | UNIT |
|--|--|---------------------------------------|------------|------|
| Maximum Repetitive Peak Rever                    | $V_{RRM}$                                | 45                                    | V          |      |
| Maximum non-repetitive Peak Re                   | $V_{RM}$                                 | 45                                    | V          |      |
| Maximum DC Blocking Voltage                      | $V_R$                                    | 45                                    | V          |      |
| Maximum PMS Reverse Voltage                      |  | V <sub>R(RMS)</sub>                   | 31.5       | V    |
| Average Rectified Output Curren                  | t (T <sub>C</sub> =125 ) (Note 1)        | I <sub>OUT</sub>                      | 20         | Α    |
| Non-Repetitive Peak Forward Su<br>Half-Sine-Wave | rge Current 8.3ms Single                 | I <sub>FSM</sub>                      | 150        | А    |
|  | I <sub>F</sub> =20A, T <sub>C</sub> =25  |                                       | 0.84       | V    |
| Famurand Valtage Dyen                            | I <sub>F</sub> =20A, T <sub>C</sub> =125 | \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ | 0.72       | V    |
| Forward Voltage Drop                             | $I_F=10A, T_C=25$                        | V <sub>FM</sub>                       | 0.70       | V    |
|  | $I_F=10A, T_C=125$                       |                                       | 0.57       | V    |
| Peak Reverse Current                             | T <sub>C</sub> = 25                      |                                       | 0.1        | mA   |
| at Rated DC Blocking Voltage                     | T <sub>C</sub> =125                      | I <sub>RM</sub>                       | 15         | mA   |
| Typical Junction Capacitance (No                 | ote 2)                                   | CJ                                    | 650        | pF   |
| Operating Temperature                            |  | $T_J$                                 | -65 ~ +150 |      |
| Storage Temperature                              |  | T <sub>STG</sub>                      | -65 ~ +150 |      |

Notes: 1. Thermal resistance junction to case mounted heat sink.

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<sup>2.</sup> Measured at 1.0MHz and applied reverse voltage of 4.0V DC.