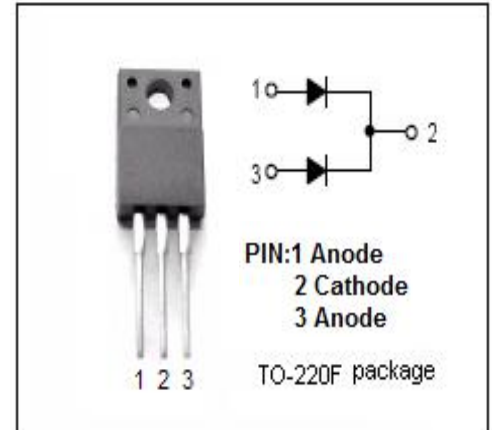


# Schottky Barrier Rectifier

# RB215T-90NZ

## FEATURES

- With TO-220F packaging
- High junction temperature capability
- Low forward voltage
- High current capability
- Low power loss, high efficiency
- Minimum Lot-to-Lot variations for robust device performance and reliable operation

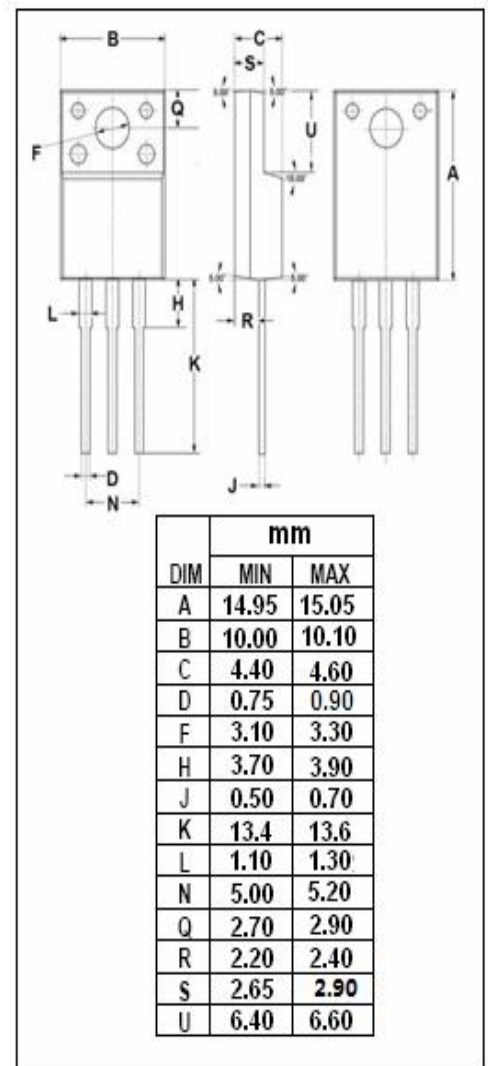


## APPLICATIONS

- Switching power supply
- Free-Wheeling diodes
- Reverse battery protection
- Center tap configuration

## ABSOLUTE MAXIMUM RATINGS( $T_a=25^\circ\text{C}$ )

| SYMBOL                          | PARAMETER  | VALUE   | UNIT             |
|---------------------------------|--|---------|------------------|
| $V_{RRM}$<br>$V_{RMS}$<br>$V_R$ | Peak Repetitive Reverse Voltage<br>RMS Voltage<br>DC Blocking Voltage                                  | 90      | V                |
| $I_{F(AV)}$                     | Average Rectified Forward Current @ $T_c=110^\circ\text{C}$  | 20      | A                |
| $I_{F(RMS)}$                    | RMS Forward Current  | 40      | A                |
| $I_{FSM}$                       | Nonrepetitive Peak Surge Current<br>(10ms single half sine-wave superimposed on rated load conditions) | 100     | A                |
| $T_J$                           | Junction Temperature   | -40~150 | $^\circ\text{C}$ |
| $T_{stg}$                       | Storage Temperature Range  | -40~150 | $^\circ\text{C}$ |



**Schottky Barrier Rectifier****RB215T-90NZ****THERMAL CHARACTERISTICS**

| SYMBOL              | PARAMETER                            | MAX  | UNIT |
|---------------------|--------------------------------------|------|------|
| R <sub>th j-c</sub> | Thermal Resistance, Junction to Case | 1.75 | °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>j</sub> = 25°C                     | 0.75 | V    |
| I <sub>R</sub> | Maximum Instantaneous Reverse Current | V <sub>R</sub> = rated V <sub>RRM</sub> ; T <sub>j</sub> = 25°C | 0.4  | mA   |

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