

# SURFACE MOUNT SCHOTTKY BARRIER DIODE

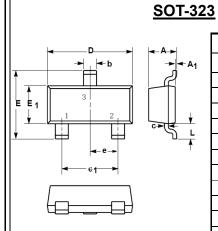
## REVERSE VOLTAGE – 40 Volts FORWARD CURRENT – 0.03 Ampere

#### **FEATURES**

- Extremely Fast Switching Speed
- Low Forward Voltage
- Very Small Conduction Losses

#### **MECHANICAL DATA**

- Case: SOT-323 Plastic
- Case Material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Moisture Sensitivity: Level 1 per J-STD-020D
- Lead Free in RoHS 2002/95/EC Compliant



| SOT-323                  |            |      |  |  |
|--------------------------|------------|------|--|--|
| Dim.                     | Min. Max.  |      |  |  |
| Α                        | 0.90       | 1.10 |  |  |
| A1                       | 0.00       | 0.10 |  |  |
| b                        | 0.20       | 0.40 |  |  |
| С                        | 0.08       | 0.15 |  |  |
| D                        | 2.00       | 2.20 |  |  |
| Е                        | 2.15       | 2.45 |  |  |
| E1                       | 1.15       | 1.35 |  |  |
| е                        | 0.65 Typ.  |      |  |  |
| e1                       | 1.20       | 1.40 |  |  |
| L                        | 0.525 Ref. |      |  |  |
| Dimensions in millimeter |            |      |  |  |
|                          |            |      |  |  |

## **Maximum Ratings & Thermal Characteristics** @ $T_A = 25^{\circ}C$ unless otherwise specified

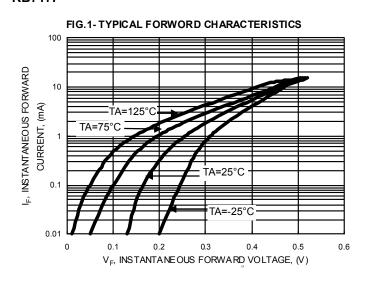
| Characteristic                      | Symbol             | RB717F   | Units |
|-------------------------------------|--------------------|----------|-------|
| Non-Repetitive Peak Reverse Voltage | $V_{RM}$           | 40       | V     |
| DC Blocking Voltage                 | V <sub>R</sub>     | 40       | V     |
| Average Rectifier Forward Current   | I <sub>F(AV)</sub> | 30       | mA    |
| Peak Forward Surge Current@t=8.3ms  | I <sub>FSM</sub>   | 200      | mA    |
| Power Dissipation                   | P <sub>D</sub>     | 200      | mW    |
| Operating Temperature Range         | T <sub>J</sub>     | 125      | °C    |
| Storage Temperature Range           | T <sub>STG</sub>   | -40~+125 | °C    |

## Electrical Characteristics @ T<sub>A</sub> = 25°C unless otherwise specified

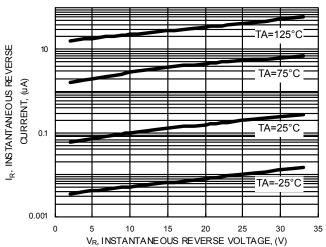
| Characteristic  | Test Condition              | Symbol         | RB717F              | Unit  |
|---|-----------------------------|----------------|---------------------|-------|
| Reverse Breakdown Voltage                               | I <sub>R</sub> = 10uA       | $V_{BR}$       | 40                  | V     |
| Maximum Forward Voltage                                 | I <sub>F</sub> = 1mA        | $V_{F}$        | 370                 | mV    |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | V <sub>R</sub> = 10V        | I <sub>R</sub> | 1                   | uA    |
| Typical Diode Capacitance                               | V <sub>R</sub> =1.0V,f=1MHz | C <sub>D</sub> | 2                   | pF    |
|   |                             |                | REV. 1, Oct-2010, K | SHR49 |

#### **RATING AND CHARACTERISTIC CURVES RB717F**

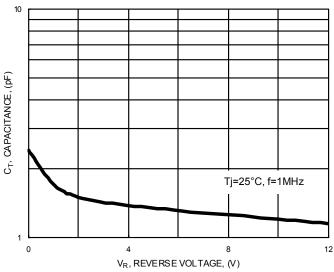




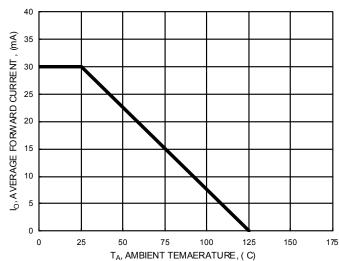
## FIG.2- TYPICAL REVERSE CHARACTERISTICS











#### **Device Marking:**

| Device P/N | Marking | Equivalent Circuit Diagram |
|------------|---------|----------------------------|
| RB717F     | 3E      | 3 0 0 1                    |



## **Important Notice and Disclaimer**

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