

## SOT-23 Plastic-Encapsulate Transistors

### RB495D SCHOTTKY BARRIER DIODE

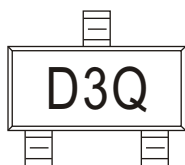
#### FEATURES

- Small Surface Mounting Type
- Low Forward Voltage
- Low Reverse Current
- High Reliability

#### APPLICATIONS

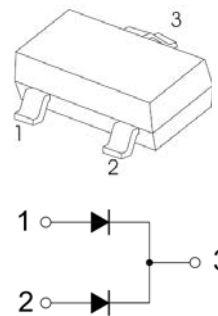
- General Rectification

#### MARKING: D3Q



D3Q = Device code

#### SOT-23



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

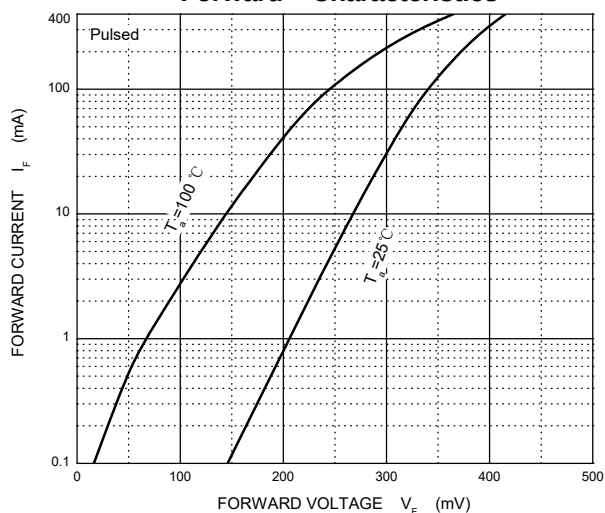
| Symbol          | Parameter                                         | Value      | Unit                        |
|-----------------|---------------------------------------------------|------------|-----------------------------|
| $V_{RRM}$       | Peak Repetitive Reverse Voltage                   | 40         | V                           |
| $V_{RWM}$       | Working Peak Reverse Voltage                      |            |                             |
| $V_{R(RMS)}$    | RMS Reverse Voltage                               | 28         | V                           |
| $I_o$           | Continuous Forward Current                        | 400        | mA                          |
| $I_{FSM}$       | Non-repetitive Peak Forward Surge Current@t=8.3ms | 2          | A                           |
| $P_D$           | Power Dissipation                                 | 250        | mW                          |
| $R_{\theta JA}$ | Thermal Resistance from Junction to Ambient       | 400        | $^{\circ}\text{C}/\text{W}$ |
| $T_J$           | Operating Junction Temperature Range              | -40 ~ +125 | $^{\circ}\text{C}$          |
| $T_{stg}$       | Storage Temperature Range                         | -55 ~ +150 | $^{\circ}\text{C}$          |

#### ELECTRICAL CHARACTERISTICS( $T_a=25^{\circ}\text{C}$ unless otherwise specified)

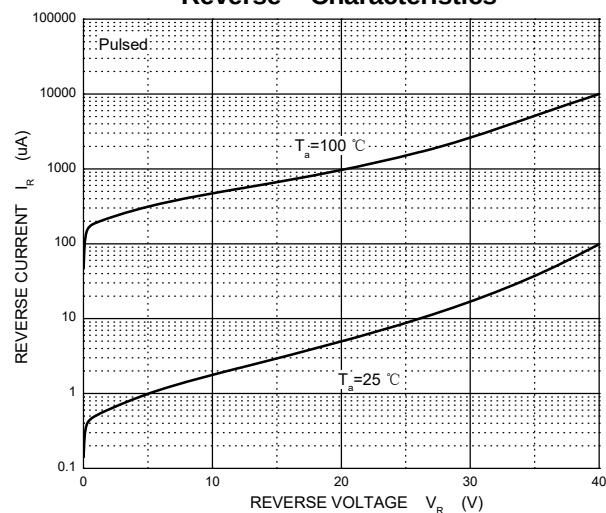
| Parameter       | Symbol     | Test conditions      | Min | Typ | Max | Unit          |
|-----------------|------------|----------------------|-----|-----|-----|---------------|
| Reverse voltage | $V_{(BR)}$ | $I_R=100\mu\text{A}$ | 25  |     |     | V             |
| Reverse current | $I_R$      | $V_R=25\text{V}$     |     |     | 70  | $\mu\text{A}$ |
| Forward voltage | $V_F$      | $I_F=10\text{mA}$    |     |     | 0.3 | V             |
|                 |            | $I_F=200\text{mA}$   |     |     | 0.5 |               |

### Typical Characteristics

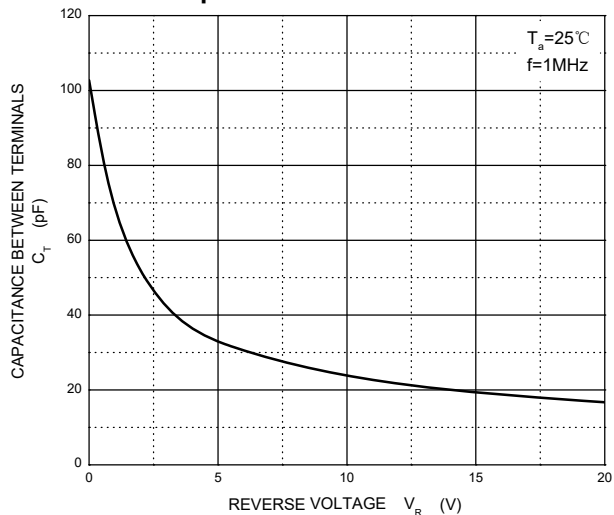
**Forward Characteristics**



**Reverse Characteristics**



**Capacitance Characteristics**



**Power Derating Curve**

