

**Reverse Voltage: 50 to 1000 V**  
**Forward Current: 2 A**

**Surface Mount**  
**High Efficiency Rectifiers**

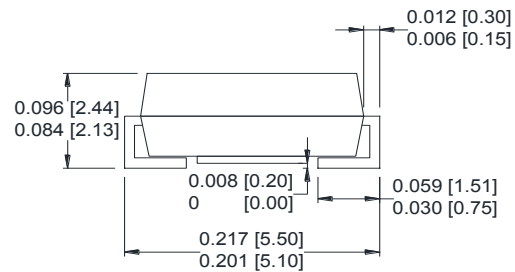
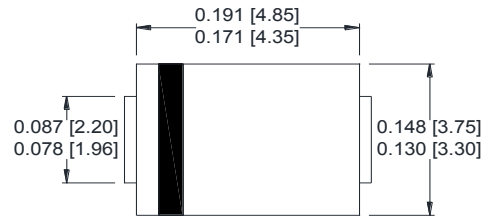
**Features**

- Glass passivated chip
- Low forward voltage
- High current capability
- High reliability
- High surge current capability
- High speed switching
- RoHS compliant

**Mechanical Data**

- Case: Molded plastic
- Epoxy: UL 94V-0 rate flame retardant
- Lead: Solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any

SMB/ DO-214AA



Dimensions: inch[mm]

**Maximum Ratings And Electrical Characteristics**  
 (T<sub>A</sub>=25°C unless otherwise noted)

| Parameter  | Symbol                            | US2A      | US2B | US2D | US2F | US2G | US2J | US2K | US2M | Unit |
|--|-----------------------------------|-----------|------|------|------|------|------|------|------|------|
| Maximum repetitive peak reverse voltage @ I <sub>T</sub> = 5μA   | V <sub>B</sub>                    | 50        | 100  | 200  | 300  | 400  | 600  | 800  | 1000 | V    |
| Maximum RMS voltage  | V <sub>R</sub>                    | 35        | 70   | 140  | 210  | 280  | 420  | 560  | 700  | V    |
| Maximum DC blocking voltage                                      | V <sub>DC</sub>                   | 50        | 100  | 200  | 300  | 400  | 600  | 800  | 1000 | V    |
| Maximum average forward rectified current @T <sub>A</sub> = 25°C | I <sub>F</sub>                    | 2.0       |      |      |      |      |      |      |      | A    |
| Maximum instantaneous forward voltage at specified current       | V <sub>F</sub>                    | 1.0       |      |      |      | 1.0  | 1.7  |      |      | V    |
| Maximum DC reverse current                                       | I <sub>R</sub>                    | 5.0       |      |      |      |      |      |      |      | μA   |
| Maximum reverse recovery time <sup>(1)</sup>                     | T <sub>rr</sub>                   | 50        |      |      |      |      | 75   |      |      | ns   |
| Operating and storage temperature range                          | T <sub>J</sub> , T <sub>STG</sub> | -55 ~ 150 |      |      |      |      |      |      |      | °C   |

**Note:**

(1) Reverse recovery test conditions: I<sub>F</sub>=0.5A, I<sub>R</sub>=1.0A, I<sub>RR</sub>=0.25A(RG1 circuit)

**Ratings and Characteristics Curves ( $T_A=25^\circ\text{C}$  unless otherwise noted)**

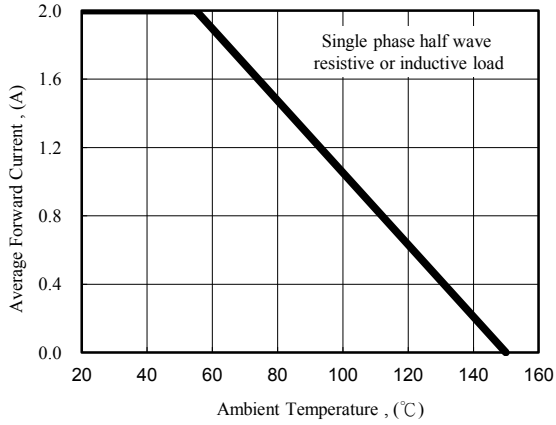


Fig. 1 - Forward Current Derating Curve

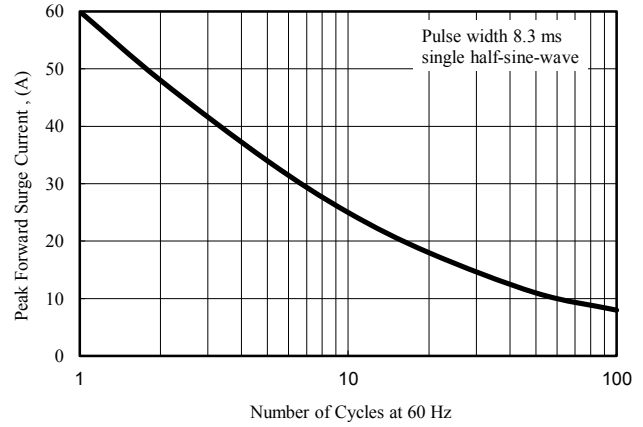


Fig. 2 - Peak Forward Surge Current

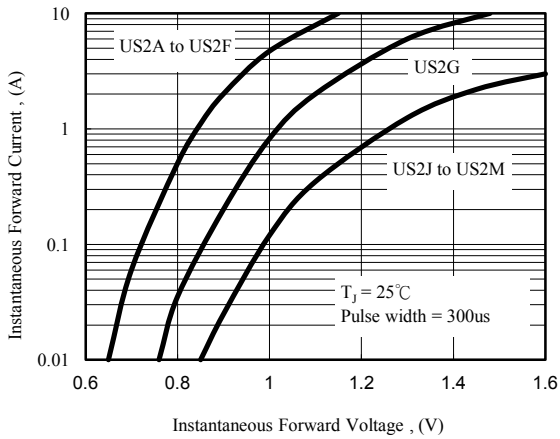


Fig. 3 - Typical Forward Characteristics

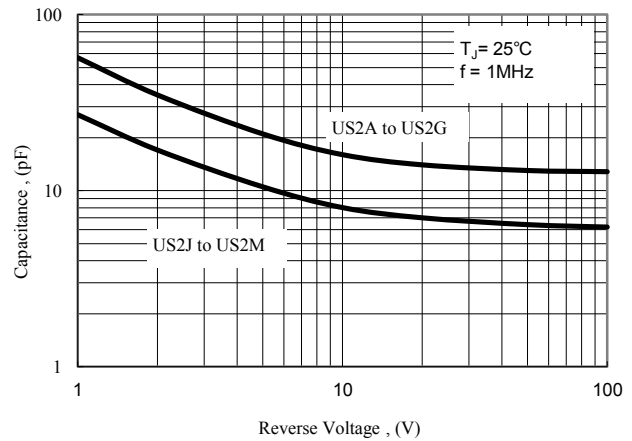


Fig. 4 - Typical Junction Capacitance