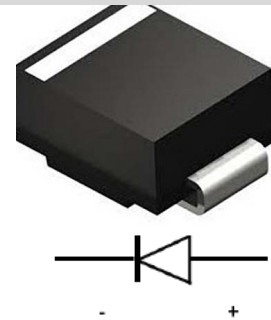


**2.0A SCHOTTKY BARRIER RECTIFIERS -20V- 200V**
**PRIMARY CHARACTERISTICS**

|             |                                |
|-------------|--------------------------------|
| $V_{RRM}$   | 20V~200V                       |
| $I_{F(AV)}$ | 2.0A                           |
| $V_F$       | 0.5V,0.7V,0.85V<br>0.92V,0.95V |
| $T_{J,Max}$ | 125°C,150°C                    |

**FEATURES**

- Low reverse leakage
- High forward surge capability
- High temperature soldering guaranteed: 260°C/10seconds
- Moisture Sensitivity Level 1

**SCHEMATIC DIAGRAM  
DO-214AA(SMB) PACKAGE**

**MECHANICAL DATA**

- Case : Molded plastic, DO-214AA(SMB)
- Polarity : Shown above
- Terminals :Plated terminals, solderable per MIL-STD-750,Method 2026
- Epoxy : UL94-V0 rated flame retardant

Maximum Ratings & Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

| Parameter                                                                | Symbols            | SK22B     | SK23B | SK24B | SK25B | SK26B | SK28B      | SK210B | SK215B | SK220B | Unit |
|--------------------------------------------------------------------------|--------------------|-----------|-------|-------|-------|-------|------------|--------|--------|--------|------|
| Maximum repetitive peak reverse voltage                                  | V <sub>RRM</sub>   | 20        | 30    | 40    | 50    | 60    | 80         | 100    | 150    | 200    | V    |
| Maximum RMS voltage                                                      | V <sub>RMS</sub>   | 14        | 21    | 28    | 35    | 42    | 56         | 70     | 105    | 140    | V    |
| Maximum DC blocking voltage                                              | V <sub>DC</sub>    | 20        | 30    | 40    | 50    | 60    | 80         | 100    | 150    | 200    | V    |
| Maximum average forward rectified current                                | I <sub>F(AV)</sub> | 2.0       |       |       |       |       |            |        |        |        | A    |
| Non-repetitive peak forward surge current<br>8.3 ms singlehalf sine-wave | I <sub>FSM</sub>   | 50        |       |       |       |       |            |        |        |        | A    |
| Maximum forward<br>voltage@IF=2.0A                                       | V <sub>F</sub>     | 0.55      |       |       | 0.70  |       | 0.85       |        | 0.92   | 0.95   | V    |
| Maximum reverse<br>current@VDC<br>TA= 25°C<br>TA= 100°C                  | I <sub>R</sub>     | 0.5       |       |       |       |       | 0.1        |        |        |        | mA   |
|                                                                          |                    | 20        |       |       |       |       | 10         |        |        |        |      |
| Typical thermal resistance<br>(Note 1)                                   | R <sub>θJA</sub>   | 85        |       |       |       |       |            |        |        |        | °C/W |
|                                                                          | R <sub>θJL</sub>   | 25        |       |       |       |       |            |        |        |        |      |
| VR=4.0V,f=1MHz Type<br>junction capacitance                              | C <sub>J</sub>     | 180       |       |       |       |       |            |        |        |        | pF   |
| Operating junction                                                       | T <sub>J</sub>     | -55 ~+125 |       |       |       |       | -55 ~ +150 |        |        |        | °C   |
| Storage temperature rang                                                 | T <sub>STG</sub>   | -55 ~+150 |       |       |       |       |            |        |        |        | °C   |

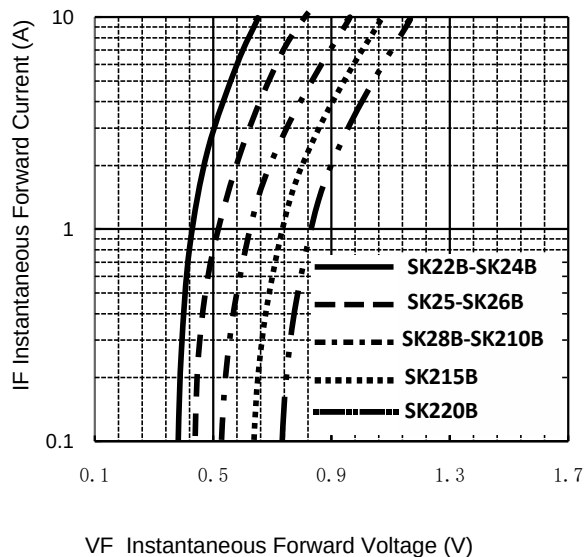
Note:

1) Thermal resistance from junction to ambient , PCB mounted.

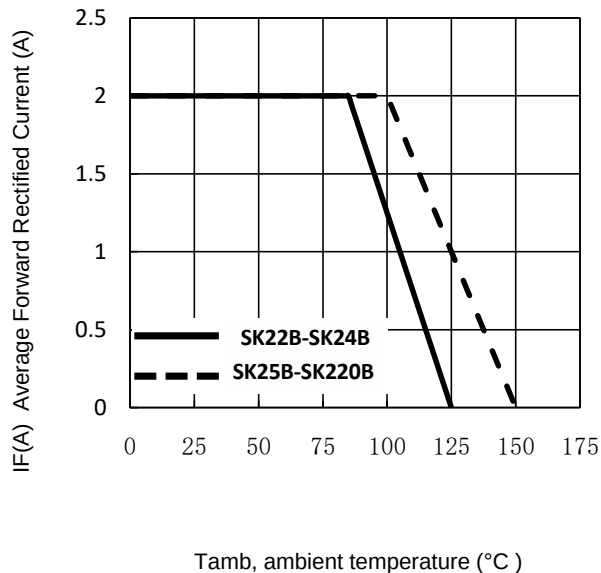


### Characteristic Curves

TYPICAL FORWARD CHARACTERISTIC

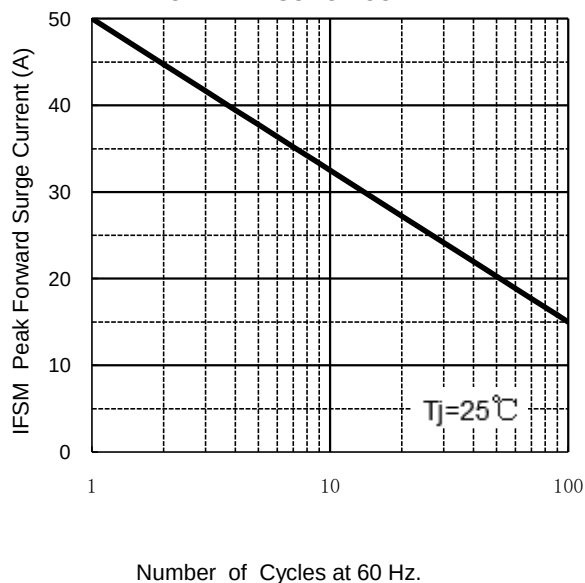


FORWARD CURRENT DERATING CURVE

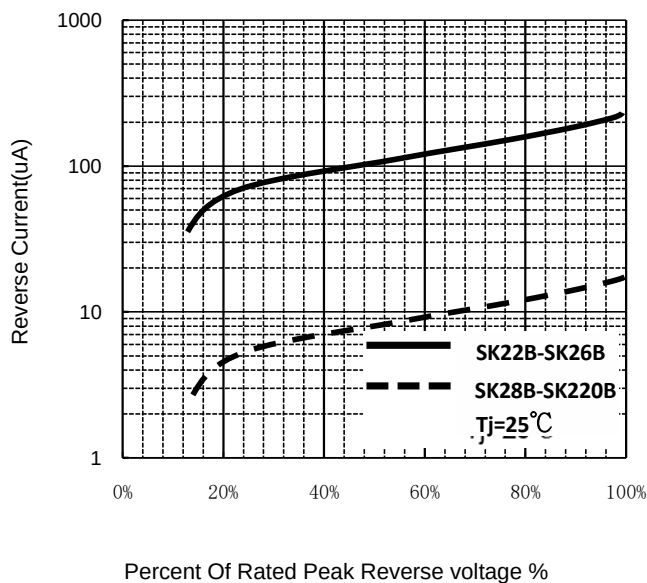


$T_j = 25^\circ\text{C}$

MAXIMUM NON REPETITIVE  
PEAK FORWARD SURGE CURRENT

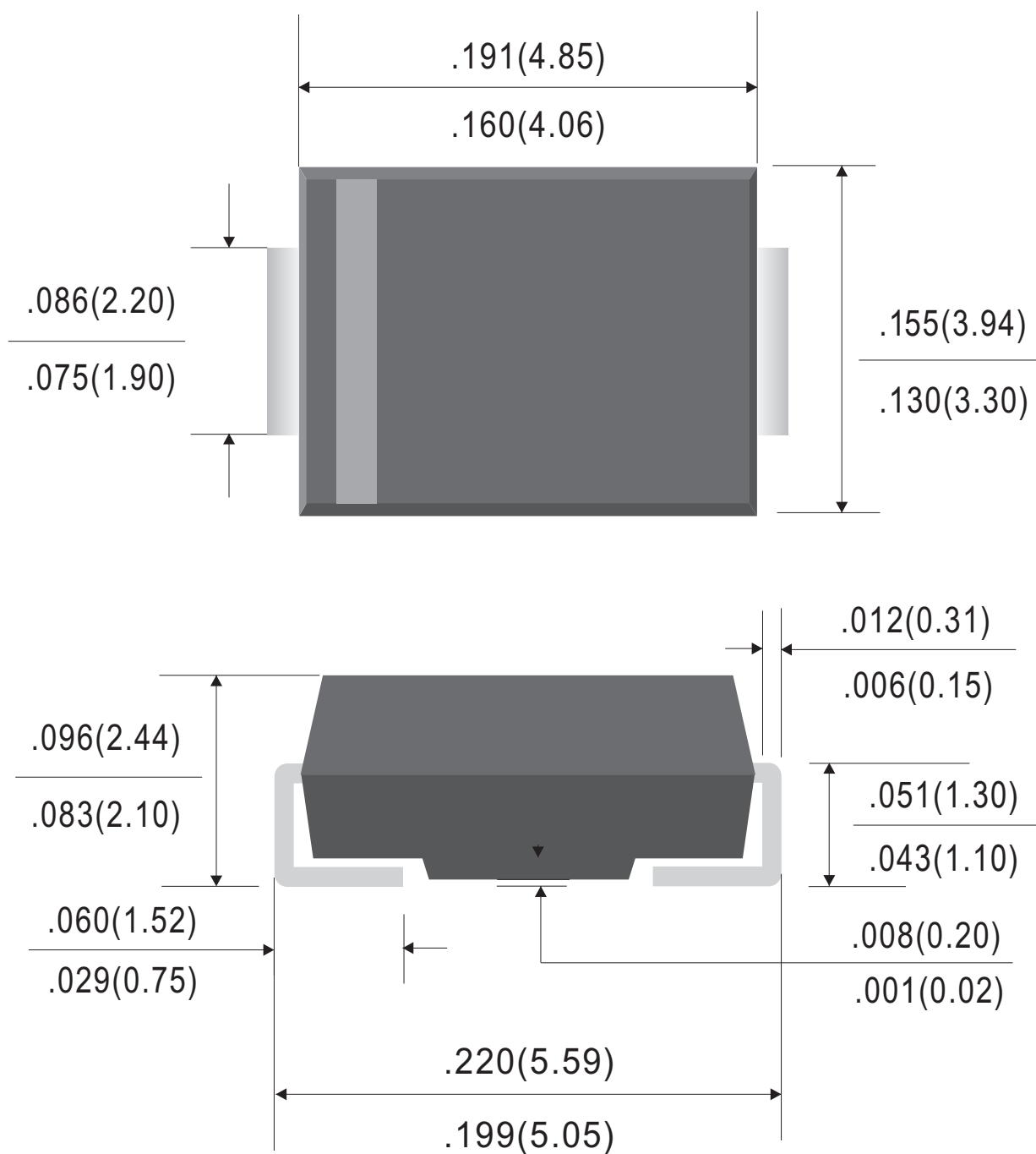


Typical Reverse Characteristics



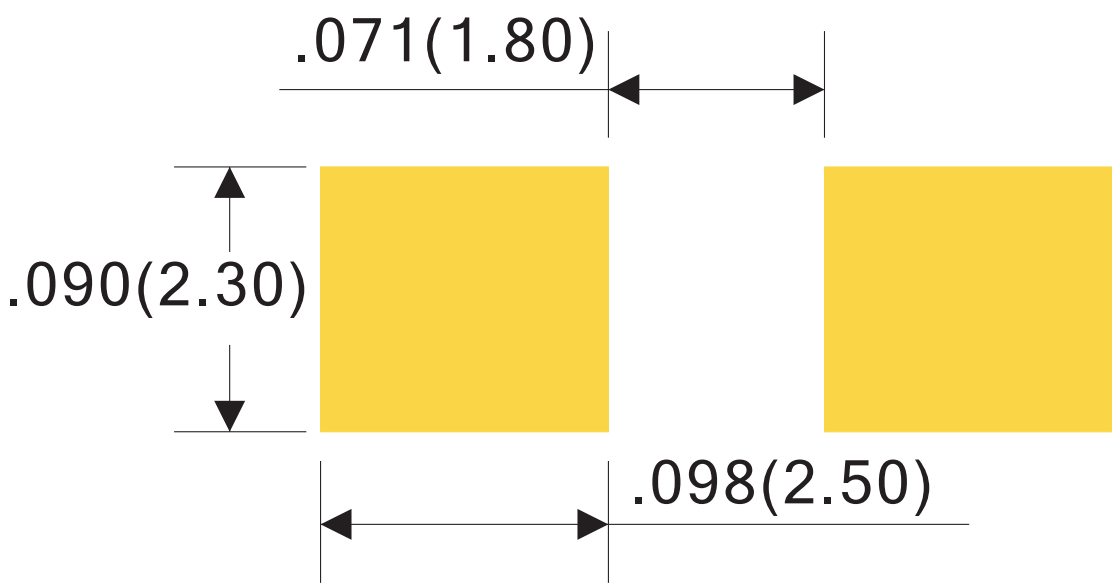
# Outline Drawing

# SMB(DO-214AA)



Dimensions in inches and (millimeters)

Rev.G

| Suggested Soldering Pad Layout                                                                                                    | SMB |
|-----------------------------------------------------------------------------------------------------------------------------------|-----|
|  <p>Dimensions in inches and (millimeters)</p> |     |
| RevA                                                                                                                              |     |

**Ordering Information:**

| Device PN                                                        | Marking <sup>(4)</sup> | Packing                |
|------------------------------------------------------------------|------------------------|------------------------|
| Part Number-T <sup>(1)</sup> G <sup>(2)</sup> -WS <sup>(3)</sup> | Part Number            | Tape&Reel: 3 Kpcs/Reel |

Note: (1) Packing code, Tape & Reel Packing

(2) Packing code suffix "G" for RoHS product : Packing code Suffix "H" for halogen free product  
All materials and products supplied comply with the U.S. Toxic Substances Control Act statement, PBT Chemicals

(3) Willas brand abbreviation, Label Type does not display

(4) There may be additional marking, which relates to the lot trace code information (data code and vendor code), the logo or the environmental category on the device

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