

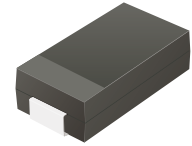
## RS2AB-HF Thru. RS2MB-HF

Reverse Voltage: 50 to 1000 Volts

Forward Current: 2 Amp

RoHS Device

Halogen Free



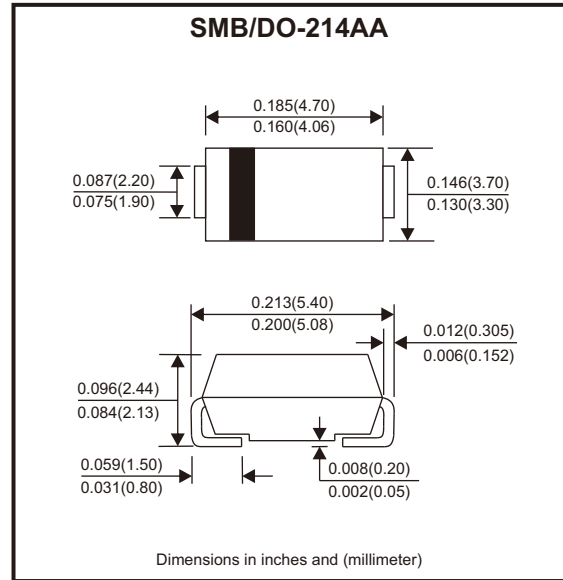
### Features

- For surface mounted applications.
- Low profile package.
- Glass passivated chip junction.
- Easy to pick and place.
- Fast reverse recovery time.

### Mechanical data

- Case: SMB
- Terminals: Solderable per MIL-STD-750, method 2026.

### Circuit Diagram



### Maximum Ratings and Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.  
Single phase, half wave, 60Hz resistive or inductive load, for capacitive load, derate by 20%

| Parameter  | Symbols                              | RS2AB<br>-HF | RS2BB<br>-HF | RS2DB<br>-HF | RS2GB<br>-HF | RS2JB<br>-HF | RS2KB<br>-HF | RS2MB<br>-HF | Units |
|--|--------------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|-------|
| Maximum repetitive peak reverse voltage  | V <sub>RRM</sub>                     | 50           | 100          | 200          | 400          | 600          | 800          | 1000         | V     |
| Maximum RMS voltage  | V <sub>RMS</sub>                     | 35           | 70           | 140          | 280          | 420          | 560          | 700          | V     |
| Maximum DC blocking voltage  | V <sub>DC</sub>                      | 50           | 100          | 200          | 400          | 600          | 800          | 1000         | V     |
| Maximum average forward rectified current  | I <sub>F(AV)</sub>                   | 2            |              |              |              |              |              |              | A     |
| Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load | I <sub>FSM</sub>                     | 60           |              |              |              |              |              |              | A     |
| Max. forward voltage at 2A   | V <sub>F</sub>                       | 1.3          |              |              |              |              |              |              | V     |
| Maximum DC reverse current at rated DC blocking voltage                            | I <sub>R</sub>                       | 5<br>100     |              |              |              |              |              |              | μA    |
| Typical junction capacitance at V <sub>R</sub> = 4V, f = 1MHz                      | C <sub>j</sub>                       | 28           |              |              |              |              |              |              | pF    |
| Maximum reverse recovery time (Note 1)   | t <sub>rr</sub>                      | 150          |              |              |              | 250          | 500          |              | ns    |
| Typical thermal resistance (Note 2)  | R <sub>θJA</sub><br>R <sub>θJC</sub> | 60<br>20     |              |              |              |              |              |              | °C/W  |
| Operating and storage temperature range  | T <sub>j</sub> , T <sub>stg</sub>    | -55 ~ +150   |              |              |              |              |              |              | °C    |

Notes: 1. Measured with I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1A, I<sub>rr</sub> = 0.25A.  
2. P.C.B. mounted with 2.0" x 2.0" (5 x 5 cm) copper pad areas.

Company reserves the right to improve product design, functions and reliability without notice.

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## Rating and Characteristic Curves (RS2AB-HF Thru. RS2MB-HF)

Fig.1 - Forward Current Derating Curve

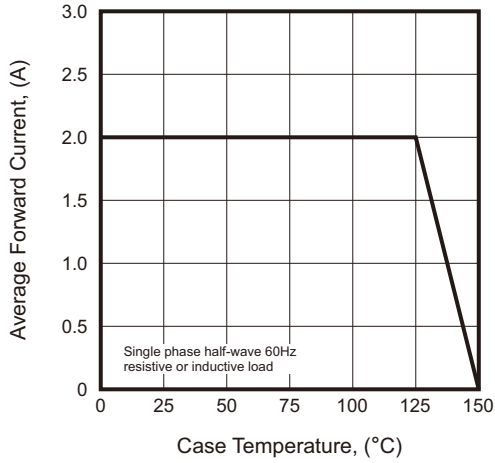


Fig.2 - Typical Reverse Characteristics

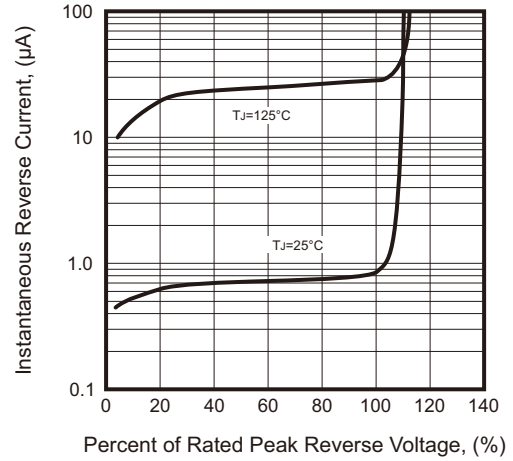


Fig.3 - Typical Instaneous Forward Characteristic

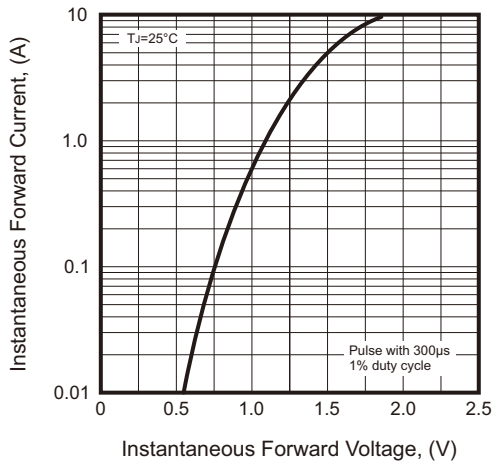


Fig.4 - Typical Junction Capacitance

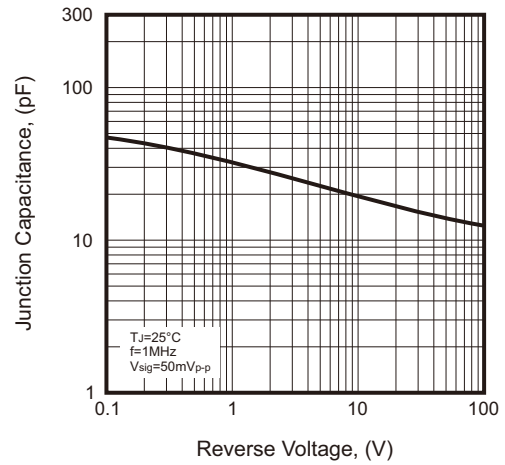
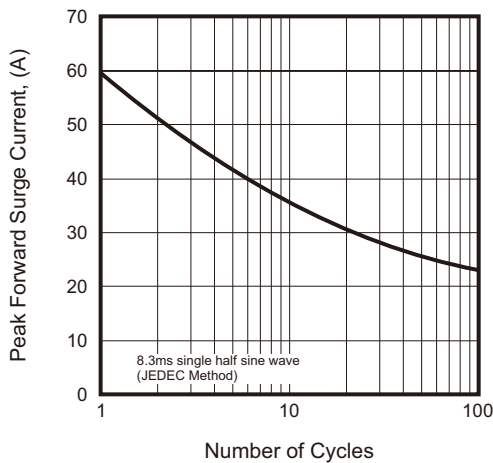
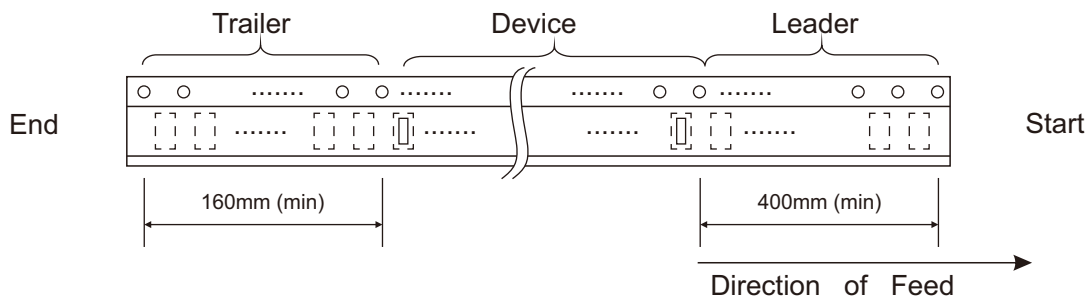
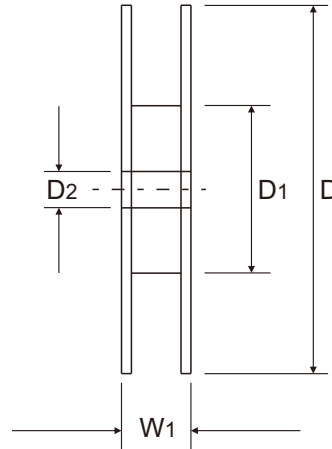
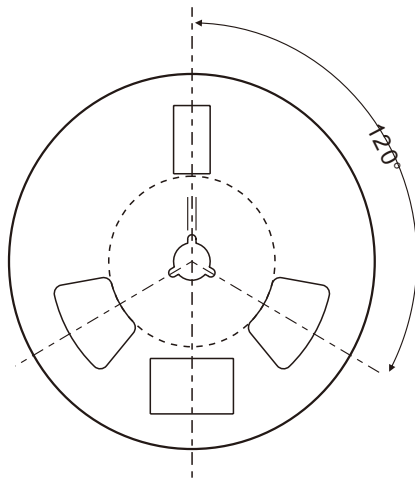
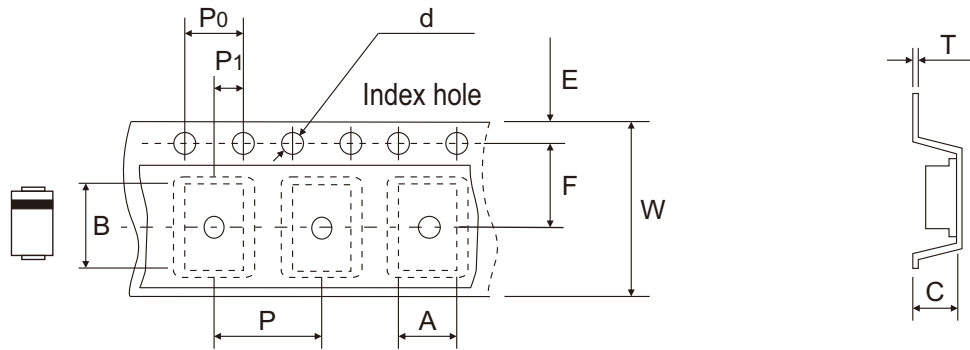


Fig.5 - Maximum Non-Repetitive Peak Forward Surge Current



## Reel Taping Specification



| DO-214AA<br>(SMB) | SYMBOL | A             | B                        | C             | d             | D              | D1            | D2            |
|-------------------|--------|---------------|--------------------------|---------------|---------------|----------------|---------------|---------------|
|                   | (mm)   | 3.80 ± 0.10   | 5.50 + 0.05<br>- 0.10    | 2.45 ± 0.05   | 1.55 ± 0.05   | 330 ± 2.00     | 100 ± 1.00    | 13.00 ± 0.20  |
|                   | (inch) | 0.150 ± 0.004 | 0.217 + 0.002<br>- 0.004 | 0.096 ± 0.002 | 0.061 ± 0.002 | 12.992 ± 0.079 | 3.937 ± 0.039 | 0.512 ± 0.008 |

| DO-214AA<br>(SMB) | SYMBOL | E             | F             | P             | P0            | P1            | T             | W             | W1                       |
|-------------------|--------|---------------|---------------|---------------|---------------|---------------|---------------|---------------|--------------------------|
|                   | (mm)   | 1.75 ± 0.10   | 5.50 ± 0.05   | 8.00 ± 0.10   | 4.00 ± 0.10   | 2.00 ± 0.05   | 0.25 ± 0.05   | 12.00 ± 0.15  | 18.00 + 2.00<br>- 1.00   |
|                   | (inch) | 0.069 ± 0.004 | 0.217 ± 0.002 | 0.315 ± 0.004 | 0.157 ± 0.004 | 0.079 ± 0.002 | 0.010 ± 0.002 | 0.472 ± 0.006 | 0.709 + 0.079<br>- 0.039 |

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