

## 3-Ampere, 20-200 Voltage Schottky Barrier Metal-Silicon Rectifiers

### ■ Features

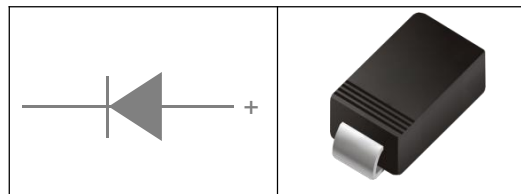
- Metal silicon junction
- Low power loss and high efficiency
- Super fast reverse recovery time
- High surge current capability
- The plastic case material has UL flammability classification rating 94V-0

### ■ Mechanical Data

- Package: SMA
- Polarity: As marked
- Lead free complies with the EU ROHS directive
- Terminals: Tin plated leads, solderable per Mil-STD-750 Method 2026



| Key Parameters |        |      |
|----------------|--------|------|
| Parameter      | Value  | Unit |
| $I_F$          | 3      | A    |
| $V_{RRM}$      | 20~200 | V    |
| $I_{FSM}$      | 60     | A    |
| Package        | SMA    |      |



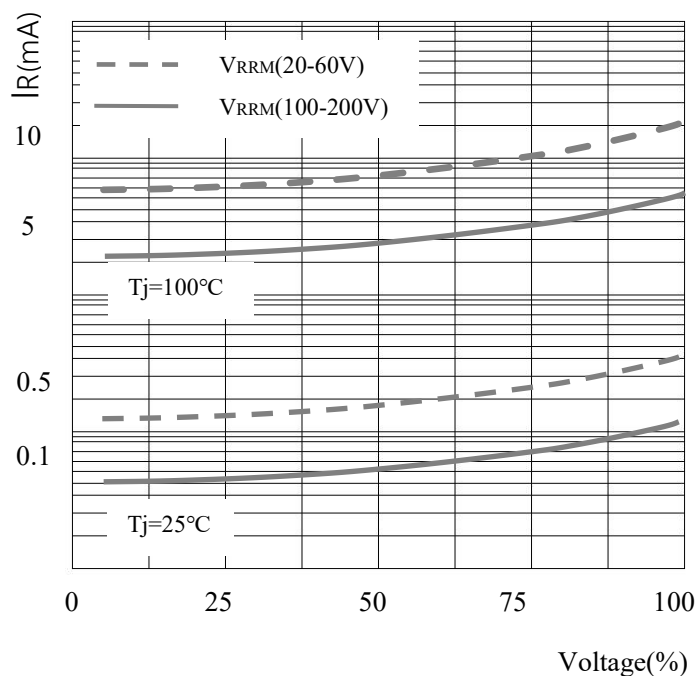
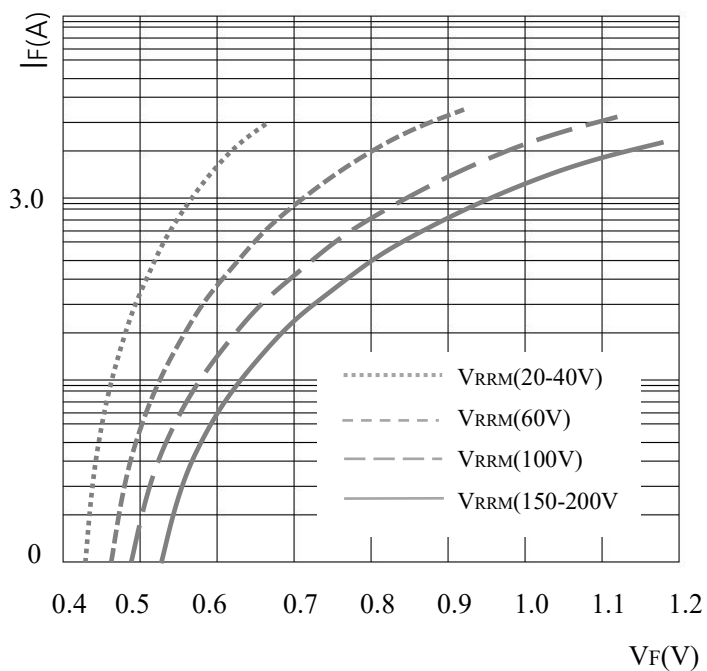
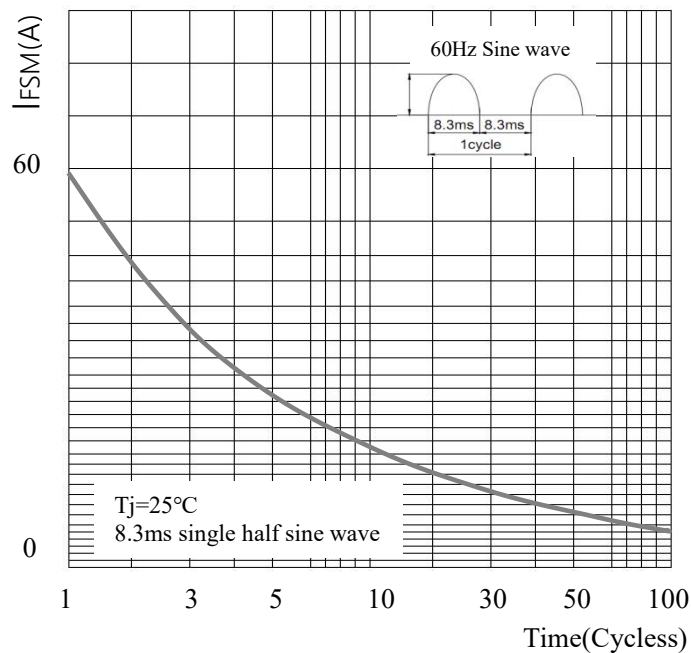
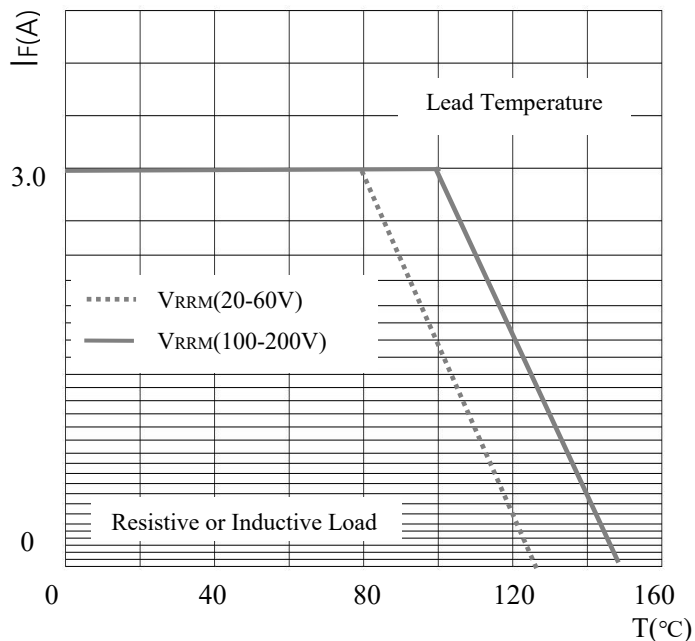
### ■ Typical applications

- For use in general purpose rectification of power supplies, inverters, converters and freewheeling diodes for consumer, and telecommunication.

### ■ Maximum Ratings @ $T_a = 25^\circ\text{C}$ unless otherwise noted

| PARAMETER                                                                             |                       | SYMBOL           | B340A    | B360A    | UNIT             |
|---------------------------------------------------------------------------------------|-----------------------|------------------|----------|----------|------------------|
| Maximum recurrent peak reverse voltage                                                |                       | V <sub>RRM</sub> | 40       | 60       | V                |
| Maximum RMS voltage                                                                   |                       | V <sub>RSM</sub> | 28       | 42       | V                |
| Maximum DC Blocking Voltage                                                           |                       | V <sub>DC</sub>  | 40       | 60       | V                |
| Maximum average forward rectified current at<br>T <sub>L</sub> =100°C                 |                       | I <sub>FM</sub>  | 3.0      |          | A                |
| Peak forward surge current 8.3 ms single half sine wave<br>superimposed on rated load |                       | I <sub>FSM</sub> | 60       |          | A                |
| Peak forward surge current 1.0 ms single half sine wave<br>superimposed on rated load |                       |                  | 120      |          | A                |
| Current squared time<br>@1ms≤t<8.3ms T <sub>j</sub> =25°C, Rating of per diode        |                       | I <sup>2</sup> t | 14.94    |          | A <sup>2</sup> S |
| Maximum instantaneous forward voltage<br>@I <sub>F</sub> =I <sub>FM</sub>             |                       | V <sub>F</sub>   | 0.55     | 0.7      | V                |
| Maximum DC reverse current at<br>rated DC blocking voltage                            | T <sub>j</sub> =25°C  | I <sub>R</sub>   | 0.5      | 0.1      | mA               |
|                                                                                       | T <sub>j</sub> =100°C | I <sub>R</sub>   | 10       | 5        | mA               |
| Junction temperature range                                                            |                       | T <sub>j</sub>   | -55~+125 | -55~+150 | °C               |
| Storage temperature range                                                             |                       | T <sub>STG</sub> | -55~+150 |          | °C               |

## ■Characteristic Curve



## ■ Package Outline Dimensions (SMA)

| Symbol | Dimensions  |       |        |       |
|--------|-------------|-------|--------|-------|
|        | Millimeters |       | Inches |       |
|        | Min.        | Max.  | Min.   | Max.  |
| A      | 1.25        | 1.65  | 0.049  | 0.065 |
| B      | 3.95        | 4.65  | 0.156  | 0.183 |
| C      | 2.35        | 2.85  | 0.093  | 0.112 |
| D      | 1.98        | 2.41  | 0.078  | 0.095 |
| E      | 0.76        | 1.52  | 0.030  | 0.060 |
| F      | -           | 0.203 | -      | 0.008 |
| G      | 4.70        | 5.30  | 0.185  | 0.209 |
| H      | 0.15        | 0.31  | 0.006  | 0.012 |

## ■ Suggested Pad Layout

| Symbol | Reference Dimensions |        |
|--------|----------------------|--------|
|        | Millimeters          | Inches |
|        |                      |        |
| A      | 1.70                 | 0.067  |
| B      | 2.10                 | 0.082  |
| C      | 2.3                  | 0.090  |

## ■ Ordering Information

| Package | Reel Size | Reel(pcs) | Identification |
|---------|-----------|-----------|----------------|
| SMA     | 7"/11"    | 2000/5000 | <b>TOS</b>     |

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