

/ Revised record

## / Descriptions

### SMBF

Surface Mount Schottky Barrier Rectifier, Reverse Voltage:100V,Forward Current:3.0A,SMBF thin package.

## / Features

Low power loss, high efficiency, High forward surge current capability, For use in low voltage, high frequency inverters, and polarity protection applications,For surface mounted applications.Halogen free product.

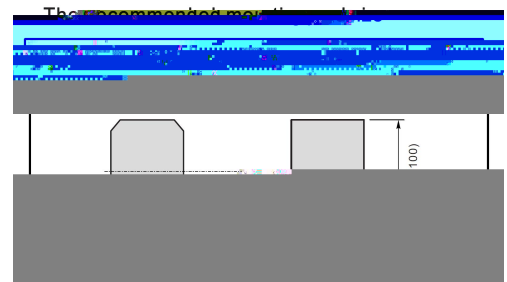
## / Applications

General purpose.

## / Equivalent Circuit



## / Pinning



## / Marking

See Marking Instructions.

**/ Absolute Maximum Ratings(Ta=25 )**

| Parameter                                                                                        | Symbol          | Rating   | Unit |
|--------------------------------------------------------------------------------------------------|-----------------|----------|------|
| Maximum Repetitive Peak Reverse Voltage                                                          | $V_{RRM}$       | 100      | V    |
| Maximum RMS voltage                                                                              | $V_{RMS}$       | 70       | V    |
| Maximum DC Blocking Voltage                                                                      | $V_{DC}$        | 100      | V    |
| Maximum Average Forward Rectified Current                                                        | $I_F (AV)$      | 3.0      | A    |
| Peak Forward Surge Current,8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method) | $I_{FSM}$       | 80       | A    |
| Typical Junction Capacitance <sup>1)</sup>                                                       | $C_j$           | 160      | pF   |
| Typical Thermal Resistance <sup>2)</sup>                                                         | $R_{\theta JA}$ | 60       | °C/W |
| Operating Junction Temperature Range                                                             | $T_j$           | -55~+150 | °C   |
| Storage Temperature Range                                                                        | $T_{stg}$       | -55~+150 | °C   |

Note:

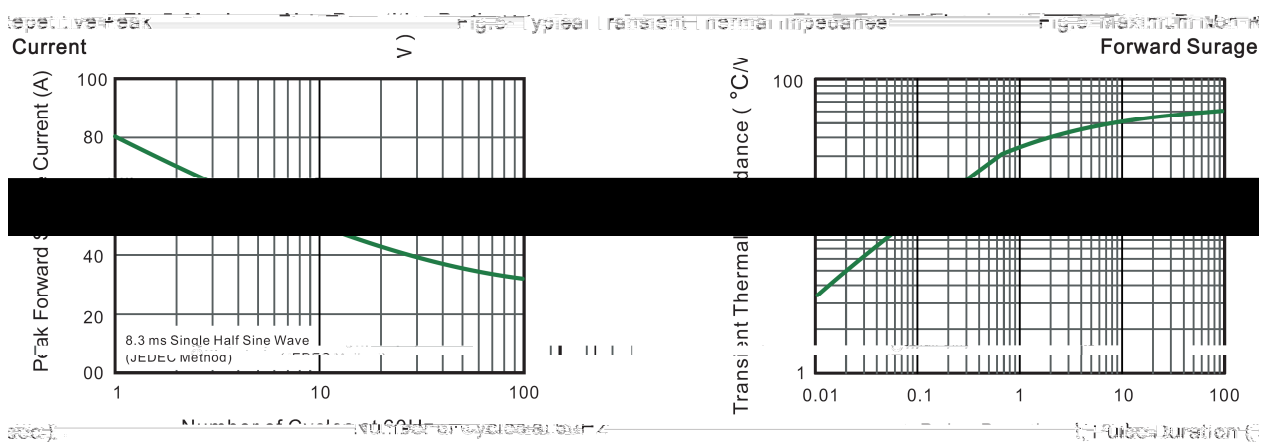
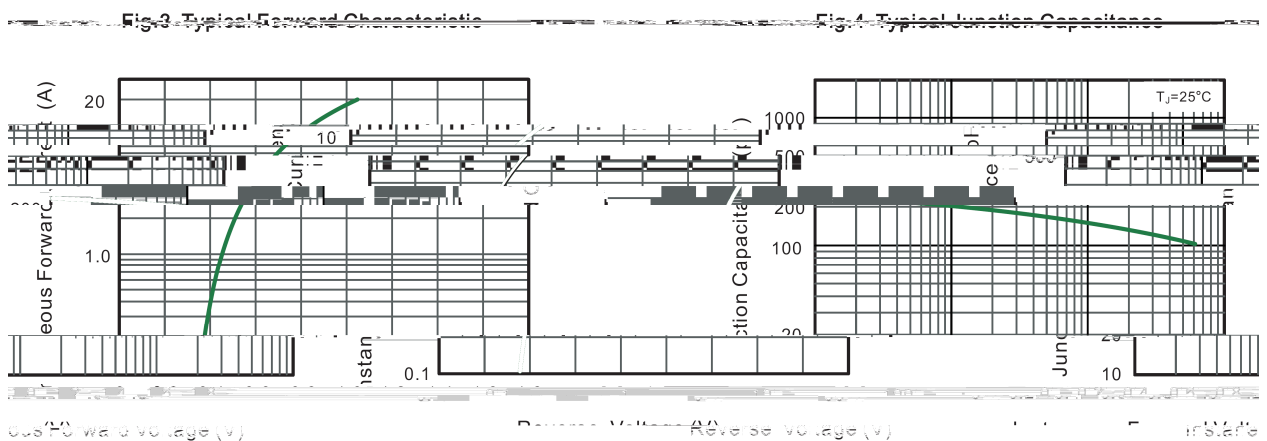
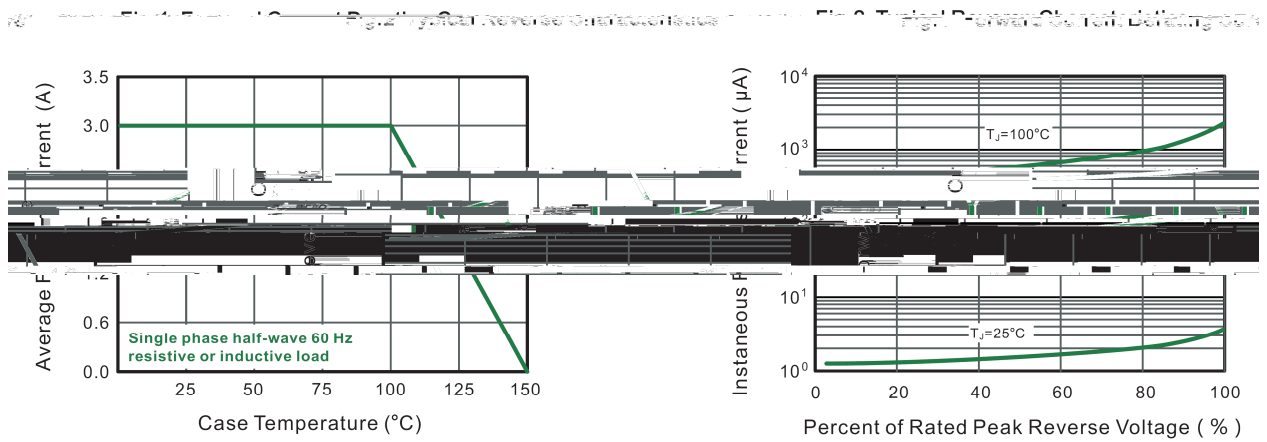
- 1 ) Measured at 1MHz and applied reverse voltage of 4 V D.C.
- 2 ) P.C.B. mounted with 2.0 X2.0" (5 X 5 cm) copper pad areas.

**/ Electrical Characteristics(Ta=25 )**

| Parameter                                              | Symbol | Test condition                          | Rating   | Unit |
|--------------------------------------------------------|--------|-----------------------------------------|----------|------|
| Max Instantaneous Forward Voltage                      | $V_F$  | $I_F=3.0A$                              | 0.6      | V    |
| Maximum DC Reverse Current at Rated DC Reverse Voltage | $I_R$  | $T_a=25^{\circ}C$<br>$T_a=100^{\circ}C$ | 1.0<br>5 | mA   |

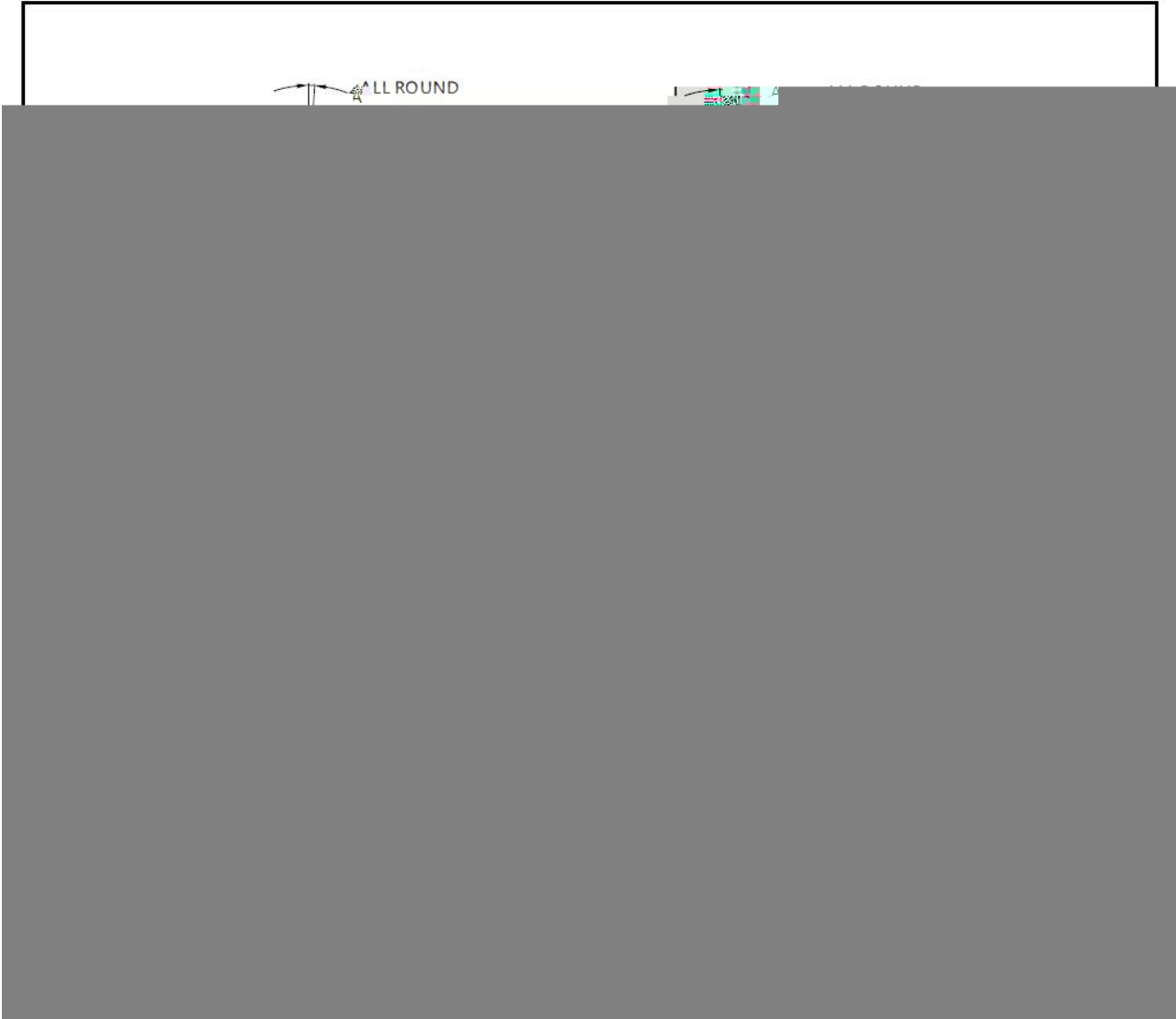


**/ Electrical Characteristic Curve**

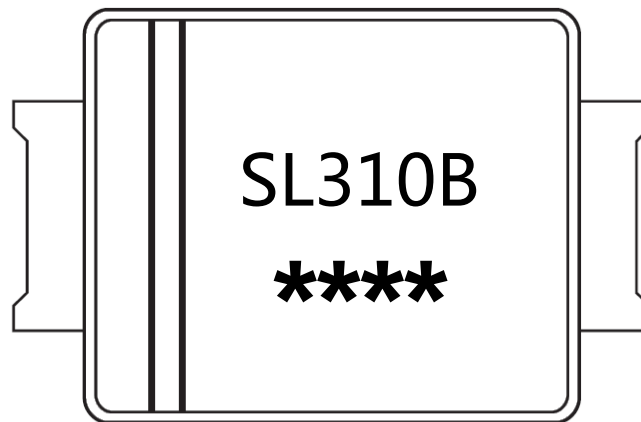


/ Package Dimensions

SMBF



**/ Marking Instructions**



SL310B

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1 \*

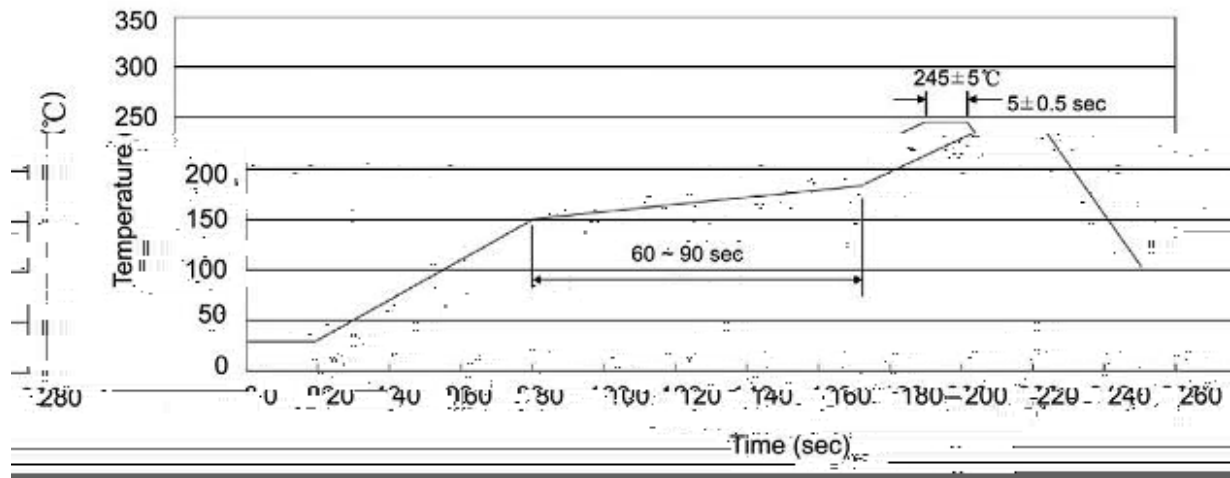
3 \*

Note:

SL310B      Product Type Code

\*\*\*\*\*      Lot No. Code    The 1st \* means:YM Code    The last 3 \* means:little Lot No  
Code

**( ) / Temperature Profile for IR Reflow Soldering(Pb-Free)**



Note:

- |   |       |     |           |        |                                         |
|---|-------|-----|-----------|--------|-----------------------------------------|
| 1 | 150   | 180 | 60        | 90sec; | 1.Preheating:150~180 , Time:60~90sec.   |
| 2 | 245±5 |     | 5±0.5sec; |        | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 |       | 2   | 10        | /sec.  | 3. Cooling Speed: 2~10 /sec.            |

**/ Resistance to Soldering Heat Test Conditions**

260±5      10±1 sec.      Temp.:260±5      Time:10±1 sec

**/ Packaging SPEC.**

/ REEL

| Package Type | Units              |                         |                        |                              |                        | Dimension (unit mm <sup>3</sup> ) |            |             |
|--------------|--------------------|-------------------------|------------------------|------------------------------|------------------------|-----------------------------------|------------|-------------|
|              | Units/Reel<br>只/卷盘 | Reels/Inner Box<br>卷盘/盒 | Units/Inner Box<br>只/盒 | Inner Boxes/Outer Box<br>盒/箱 | Units/Outer Box<br>只/箱 | Reel                              | Inner Box  | Outer Box   |
| SMBF         | 5000               | 2                       | 10000                  | 5                            | 50000                  | 13" ×12                           | 336X332X40 | 380X335X366 |

**/ Notices**