

**SURFACE MOUNT SCHOTTKY  
BARRIER RECTIFIERS**
**S5817FA--S5819FA**
**FEATURES**

- Low leakage
- Low forward voltage drop
- High current capability
- For surface mounted applications
- Easily cleaned with Alcohol, Isopropnol and similar solvents
- The plastic material carries U/L recognition 94V-0



Lead-free


**MECHANICAL DATA**

- Case: SMAFL molded plastic body
- Terminals: Solder plated, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode end

**Maximum Ratings** (@TA = 25°C unless otherwise specified)

| Characteristic  | Symbol             | S5817FA    | S5818FA    | S5819FA    | UNITS |
|---|--------------------|------------|------------|------------|-------|
| <b>Marking code</b>   |                    | <b>17F</b> | <b>18F</b> | <b>19F</b> |       |
| Maximum repetitive peak reverse voltage   | V <sub>RRM</sub>   | 20         | 30         | 40         | V     |
| Maximum RMS voltage   | V <sub>RWS</sub>   | 14         | 21         | 28         | V     |
| Maximum DC blocking voltage   | V <sub>DC</sub>    | 20         | 30         | 40         | V     |
| Average forward rectified current   | I <sub>F(AV)</sub> | 1.0        |            |            | A     |
| Peak forward surge current<br>8.3ms single half-sine-wave<br>superimposed on rated load | I <sub>FSM</sub>   | 25         |            |            | A     |

**Thermal Characteristics**

| Characteristic              | Symbol           | S5817FA      | S5818FA | S5819FA | UNITS |
|-----------------------------|------------------|--------------|---------|---------|-------|
| Operating temperature range | T <sub>J</sub>   | - 55 -- +125 |         |         | °C    |
| Storage temperature range   | T <sub>STG</sub> | - 55 -- +150 |         |         | °C    |

**Electrical Characteristics** (@TA = 25°C unless otherwise specified)

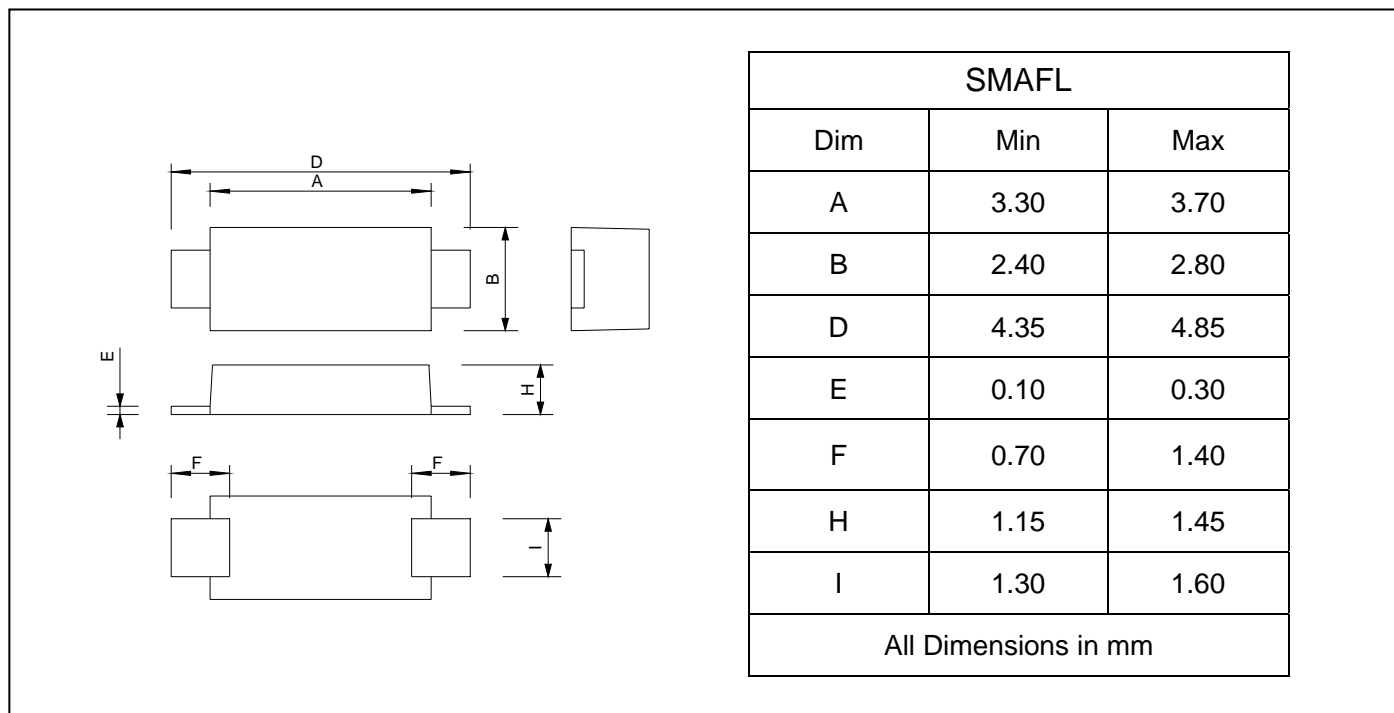
| Characteristic   | Symbol         | S5817FA   | S5818FA | S5819FA | UNITS |
|--|----------------|-----------|---------|---------|-------|
| Maximum instantaneous forward voltage<br>@I <sub>F</sub> =1.0A (Note1)                                   | V <sub>F</sub> | 0.45      | 0.55    | 0.60    | V     |
| Maximum DC reverse current @ T <sub>A</sub> =25°C<br>at rated DC blocking voltage @T <sub>A</sub> =100°C | I <sub>R</sub> | 1.0<br>10 |         |         | m A   |

NOTE: 1. Pulse test: Pulse width 300us, duty cycle 1 %

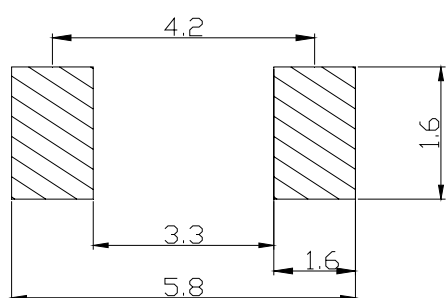
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**PACKAGE OUTLINE DIMENSIONS**



**SOLDERING FOOTPRINT**



Unit : mm

**PACKAGE INFORMATION**

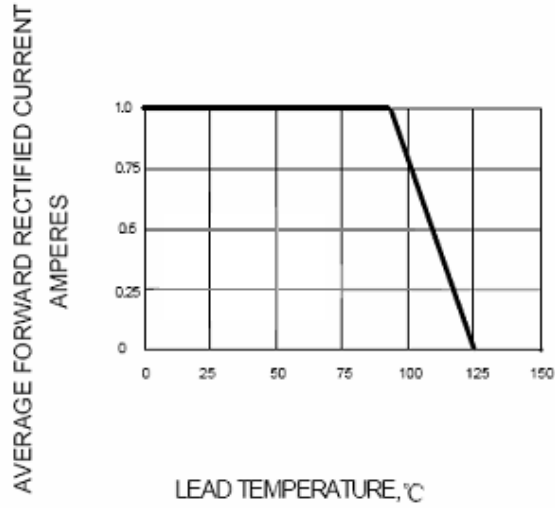
| Device           | Package | Shipping        |
|------------------|---------|-----------------|
| S5817FA--S5819FA | SMAFL   | 10000/Tape&Reel |



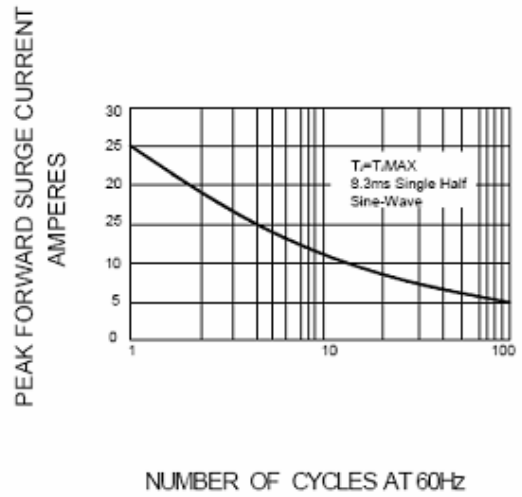
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**FIG.1 – FORWARD DERATING CURVE**



**FIG.2 – PEAK FORWARD SURGE CURRENT**



**FIG.3 – TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS**

