

/ Descriptions

40V                      3.0A                      SOD-123FL  
Surface Mount Schottky Barrier Rectifier Reverse Voltage 40V Forward Current 3.0A SOD-123FL  
thin packageIII

/ 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,HF Product.

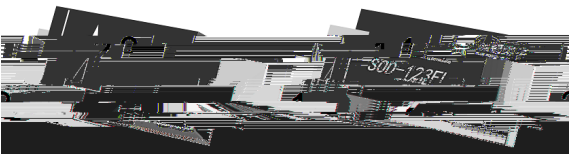
/ Applications

General purpose.

/ Equivalent Circuit

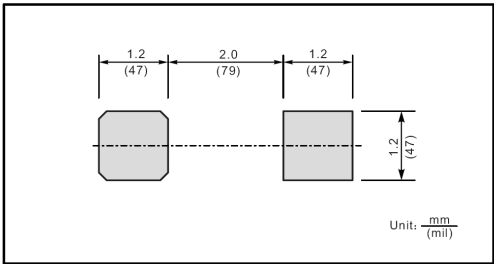


/ Pinning



| PIN | DESCRIPTION |
|-----|-------------|
| 1   | Cathode     |
| 2   | Anode       |

The recommended mounting pad size



/ Marking

See Marking Instructions.

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

| Parameter                                                                          | Symbol      | Rating     | Unit |
|------------------------------------------------------------------------------------|-------------|------------|------|
|                                                                                    |             | DSL34W     |      |
| Maximum Recurrent Peak Reverse Voltage                                             | $V_{RRM}$   | 40         | V    |
| Maximum RMS Voltage                                                                | $V_{RMS}$   | 28         | V    |
| Maximum DC Blocking Voltage                                                        | $V_{DC}$    | 40         | V    |
| Maximum Average Forward Rectified Current                                          | $I_{F\ AV}$ | 3          | A    |
| Peak Forward Surge Current 8.3 ms Single Half Sine Wave Superimposed on Rated Load | $I_{FSM}$   | 50         | A    |
| Typical Junction Capacitance <sup>1</sup>                                          | $C_i$       | 230        | pF   |
| Typical Thermal Resistance <sup>(2)</sup>                                          | $R_{JA}$    | 80         | °C/W |
| Operating Junction Temperature Range                                               | $T_j$       | -55 ~ +125 | °C   |
| Storage Temperature Range                                                          | $T_{stg}$   | -55 ~ +125 | °C   |

Note:

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

### / Electrical Characteristics(Ta=25 )

| Parameter                                               | Symbol | Test Conditions                   | Rating | Unit |
|---------------------------------------------------------|--------|-----------------------------------|--------|------|
|                                                         |        |                                   | DSL34W |      |
| Maximum Instantaneous Forward Voltage                   | $V_F$  | $I_F=3.0A$                        | 0.45   | V    |
| Maximum DC Reverse Current at Rated DC Blocking Voltage | $I_R$  | $T_a=25\text{ }^{\circ}\text{C}$  | 1.0    | mA   |
|                                                         |        | $T_a=100\text{ }^{\circ}\text{C}$ | 20     |      |

/ Electrical Characteristic Curve

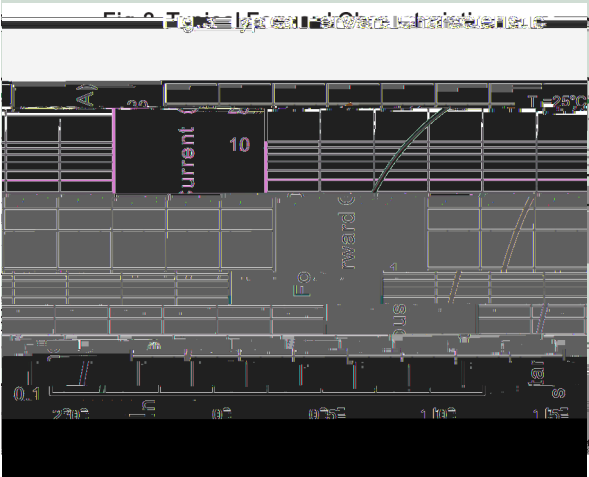
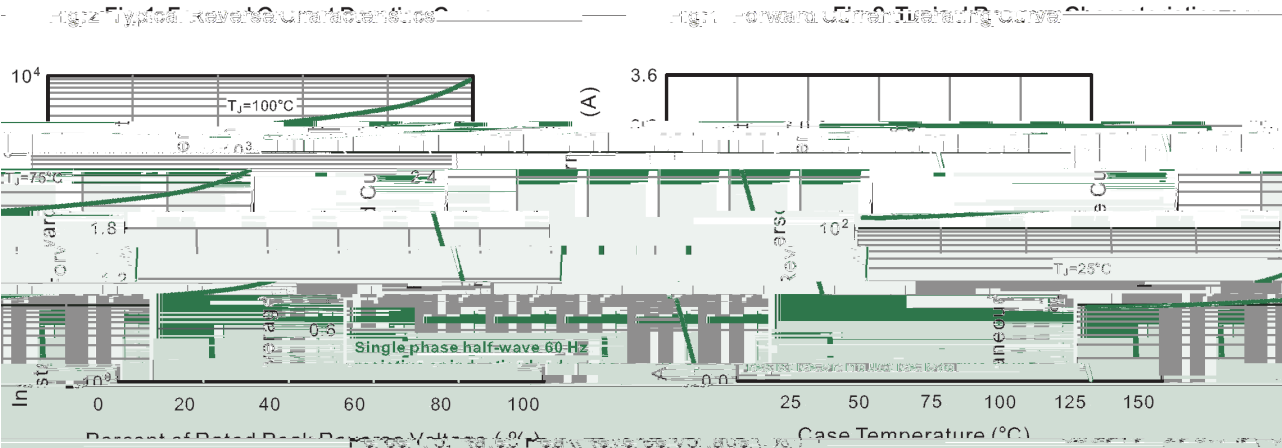


Fig. 3. Typical Transient Thermal Impedance

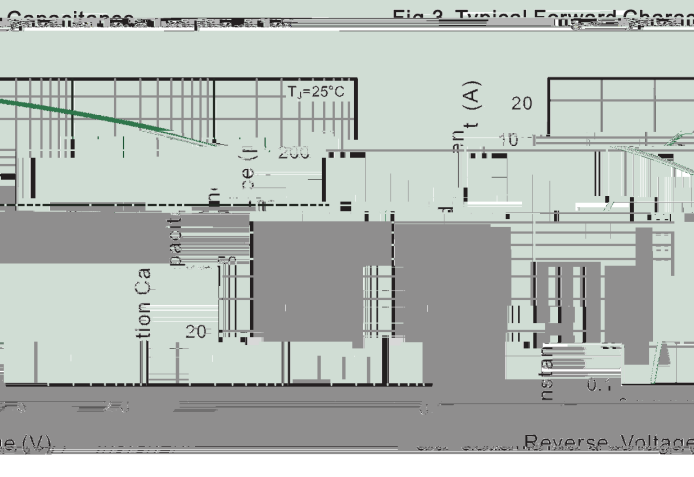
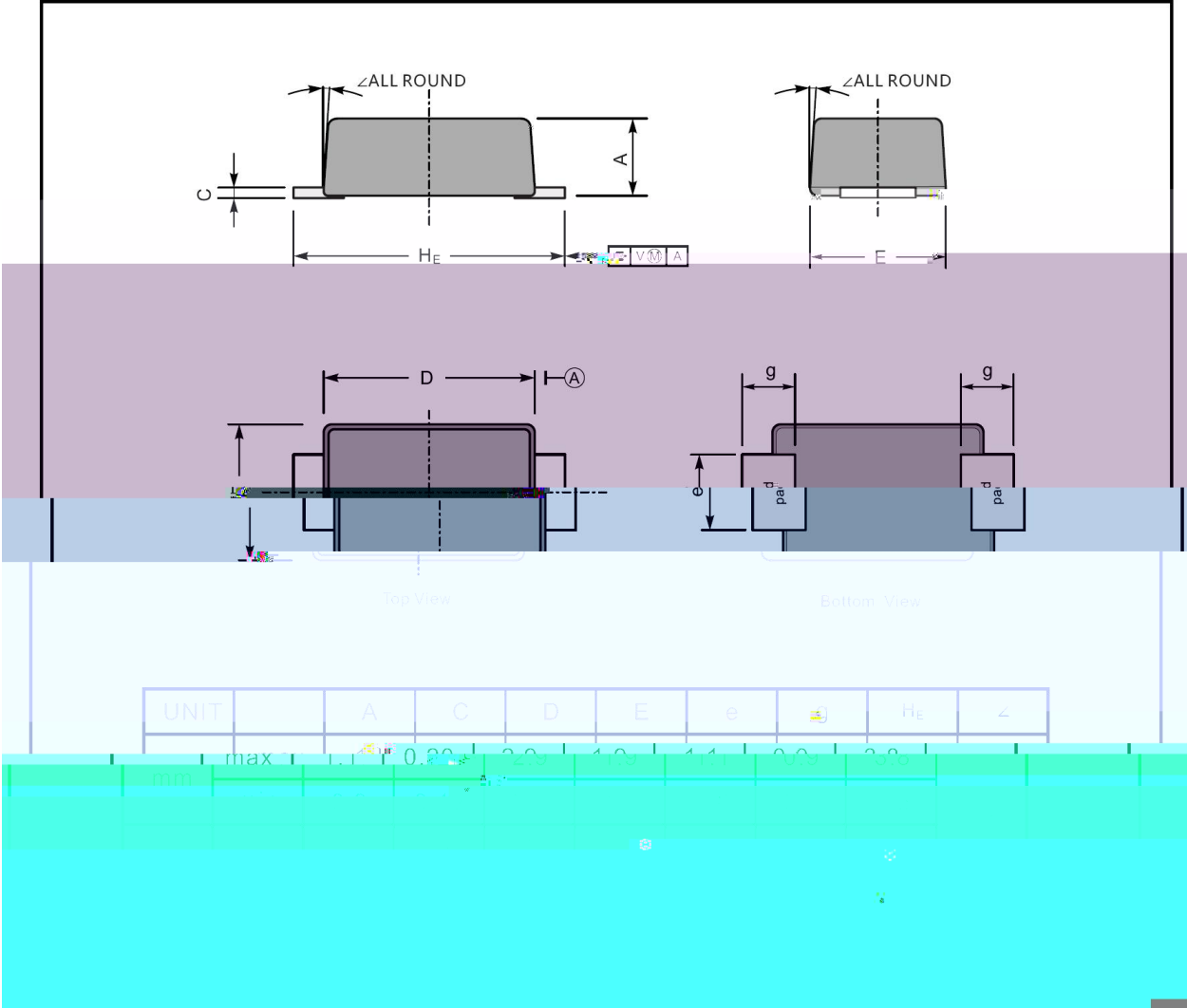


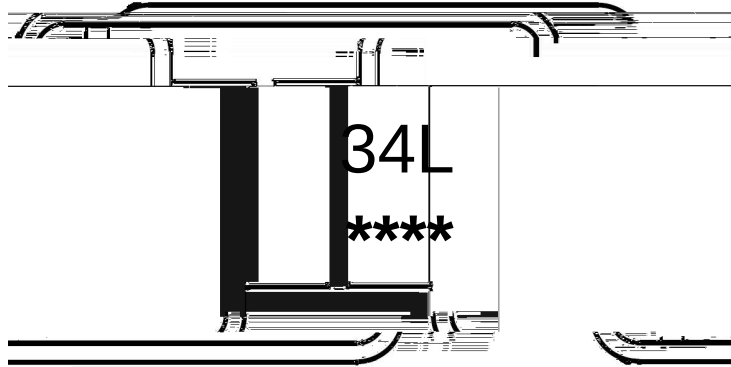
Fig. 5. Maximum Non-Repetitive

/ Package Dimensions

SOD-123FL



**/ Marking Instructions**



34L  
\*\*\*\*

Note:

34L      Product Type Code

\*\*\*\*      Lot No. Code, code change with Lot No

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

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|  |
|  |
|  |
|  |
|  |
|  |

- 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