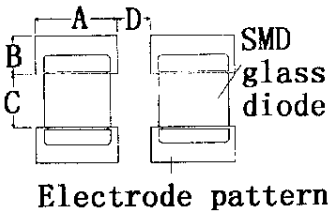
PRECAUTIONS

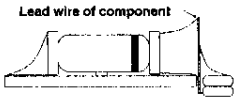
Precautions on the use of Melf Type glass diodes

<table>
<tr><th>Stages</th><th>Precautions</th><th>Technical considerations</th></tr>
<tr><td>PCB Design</td><td>Pattern configurations (Design of Land-patterns)

1.When diodes are mounted on a PCB, the amount of solder used (size of fillet) can directly affect diode performance. Therefore, the following items must be carefully considered in the design of solder land patterns:

(1).The amount of solder applied can affect the ability of chips to withstand mechanical stresses which may lead to breaking or cracking. Therefore, when designing land ¡ Vatterns it is necessary to consider the appropriate size and configuration of the solder pads which in turn determines the amount of solder necessary to form the fillets.

(2).When more than one part is jointly soldered onto the same land or pad, the pad must be designed so that each component¡s soldering point is separated by solder-resist.</td><td>1.The following diagrams and tables show some examples of recommended patterns to prevent excessive solder amounts (larger fillets which extend above the component end terminations). Examples of improper pattern designs are also shown.
(1). Recommended land dimensions for a typical SMD glass diode.
Electrode patterns for PCBs
 

Electrode pattern
Recommended land patterns for wave soldering
Unit: mm
<table>
<tr><th>TYPE / LOCATION</th><th>Mini MELF LL34</th><th>CREAM SOLDER THICKNESS</th></tr>
<tr><td>A</td><td>1.6</td><td>0.1-0.3</td></tr>
<tr><td>B</td><td>1.2</td><td>0.1-0.3</td></tr>
<tr><td>C</td><td>2.2</td><td>0.1-0.3</td></tr>
<tr><td>D</td><td>1.0</td><td>0.1-0.3</td></tr>
</table>
Recommended land patterns for reflow soldering
Unit: mm
<table>
<tr><th>TYPE / LOCATION</th><th>Mini MELF LL34</th><th>CREAM SOLDER THICKNESS</th></tr>
<tr><td>A</td><td>1.6</td><td>0.1-0.3</td></tr>
<tr><td>B</td><td>1.2</td><td>0.1-0.3</td></tr>
<tr><td>C</td><td>2.2</td><td>0.1-0.3</td></tr>
<tr><td>D</td><td>0.5 or more</td><td>0.5 or more</td></tr>
</table>
Notes:
1.When designing land patterns, rounded corners on the solder pad might result in better solderability.
2.The size of the solder pad can vary depending on the part location and amount of solder.
Therefore, please carefully consider location and solder amounts when designing solder pads.
*Examples of good and bad solder application
<table>
<tr><th>Item</th><th>Not recommended</th><th>Lead wire of component</th></tr>
<tr><td>Mixe-mounting of SMD and leaded components</td><td> 
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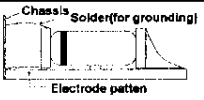
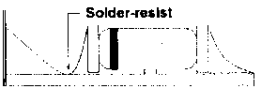
<tr><td>Component placement close to the chassis</td><td> 
</td><td> 
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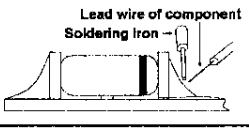
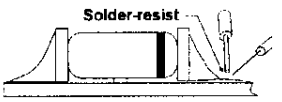
<tr><td>Hand-soldering of leaded components near mounted components</td><td> 
</td><td> 
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