### 1. Thermal tests

<table>
<thead>
<tr>
<th>Test Item</th>
<th>Test Condition</th>
<th>Failure Size / Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resistance to Soldering Heat for Packages</td>
<td>Reflow peak temperature and moisture soak conditions are specified per package type. 3 times</td>
<td>0 / 32</td>
</tr>
<tr>
<td>Temperature Cycling</td>
<td>-65°C (20min) to 25°C to 150°C (20min) to 25°C (300 cycles)</td>
<td>0 / 32</td>
</tr>
</tbody>
</table>

### 2. Mechanical tests

<table>
<thead>
<tr>
<th>Test Item</th>
<th>Test Condition</th>
<th>Failure Size / Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solderability</td>
<td>Solder temperature: 245°C for Solder type Sn-3Ag-0.5Cu Solder immersion time: 5s, Flux type: non-active flux, 1 time</td>
<td>0 / 22</td>
</tr>
<tr>
<td>Lead Integrity (Tension)</td>
<td>Tension: according to relevant specification, Maintain the specified tension for 30s</td>
<td>0 / 22</td>
</tr>
</tbody>
</table>

### 3. Life tests

<table>
<thead>
<tr>
<th>Test Item</th>
<th>Test Condition</th>
<th>Failure Size / Sample Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>High Temperature Operating Life</td>
<td></td>
<td>0 / 32</td>
</tr>
<tr>
<td>High Temperature Storage Life</td>
<td></td>
<td>0 / 32</td>
</tr>
<tr>
<td>High Temperature High Humidity Bias</td>
<td></td>
<td>0 / 32</td>
</tr>
<tr>
<td>Autoclave</td>
<td></td>
<td>0 / 32</td>
</tr>
</tbody>
</table>

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1. Reflow
- Peak: 260 deg.C
- Reflow zone: 255 deg.C within 30 seconds, 217 deg.C 60 to 150 seconds
- Preheat: 150 to 200 deg.C, 60 to 120 seconds

**NOTE**
All temperatures refer to the package body surface.

The heat-resistant temperature profile is shown in Fig.1. The temperatures in this profile are the maximum guaranteed temperatures that the device endures. Select the temperatures for a pre-heat and a heat most suitable for your solder paste type, etc. within the conditions described in Fig.1.

This package is dry-packed in a moisture barrier bag. After opening the bag, keep the devices at or lower than 30deg.C/60%RH and complete a final reflow process within 168 hours.

2. Others
We urge you to verify well before mounting to assure enough solder joint strength.

3. Times maximum

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**Fig.1 Example of Heat-resistant Temperature Profile**
Moisture Absorption Control Level (Moisture Sensitivity Level)

Product Name: TMPM375FSDMG

Package Name: SSOP30

Always store the Product under moisture sensitivity level equivalent to level 3 (JEDEC J-STD-020 Moisture Sensitivity Level). In the event the Product is stored otherwise, the applicable warranty, if any, is void.

Always perform reflow soldering in accordance with methods and conditions as specified in applicable engineering documents or specifications provided by Toshiba, or as instructed in writing by your TOSHIBA sales representative.

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