DIE ATTACH
DESIGN RULES & GUIDELINES

The following dimensions for die attach are designed to help release product to manufacturing as quickly as possible. Please contact SME@samtec.com if you have tighter requirements.

- Minimum distance between surrounding square of fiducial and neighboring objects must be 0.048 mm
- Gray level contrast between background and fiducial must be a minimum of 100 gray levels out of 256
- Background of fiducial must not have a structure and background must be single-colored gray level
- Maximum die size for dipping: 50 mm x 50 mm
- No waffle-pack handling for die <1 mm²
- Maximum length to width ratio for components: 5:1
- Saw kerfs must be at least 25 μm and into the dicing tape (through the entire wafer thickness)
- Die attach materials can be non-conductive, conductive, die-attach-films (DAF) and solder preforms; other processes can be discussed per customer requirements

### Die Attach Requirements

<table>
<thead>
<tr>
<th>Rule</th>
<th>Description</th>
<th>Organic (min) inches (µm)</th>
<th>Ceramic (min) inches (µm)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Overlap of Die Attach Ground Plane to Die Edge</td>
<td>0.020 * (500)</td>
<td>0.020 * (500)</td>
</tr>
<tr>
<td>B</td>
<td>Space between Die Attach Ground Plane to Wirebond Pad</td>
<td>0.020 * (500)</td>
<td>0.020 * (500)</td>
</tr>
<tr>
<td>C</td>
<td>Space between Fiducial Edge to Die Attach Ground Plane Edge</td>
<td>0.010 * (250)</td>
<td>0.006 * (150)</td>
</tr>
</tbody>
</table>

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