tesa® XPU 8702

50µm x-linkable polyurethane translucent HAF mounting tape

tesa® XPU 8702 is a reactive mounting tape offering high bonding strength and elasticity after curing. This translucent double-sided tape has no backing. It is protected by a PE-coated paper liner.

tesa® XPU 8702 is free of halogen according to IEC 61249-2-21 and compliant with current RoHS directive.

At room temperature tesa® XPU 8702 is not tacky. It is activated by heat and pressure applied during the assembly process.

Special features:
- Extremely high bonding performance and reliability, even on thin design gaps
- Excellent shock resistance
- Extremely low oozing ratio
- Translucent design

Main Application

tesa® XPU 8702 is especially recommended for structural bonding of various substrates inside electronic devices:
- Bonding of plastics
- Bonding of metals
- Bonding of electronic components

Technical Information (average values)

The values in this section should be considered representative or typical only and should not be used for specification purposes.

**Technical Data**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Backing material</td>
<td>none</td>
</tr>
<tr>
<td>Color</td>
<td>translucent</td>
</tr>
<tr>
<td>Total thickness</td>
<td>50 µm</td>
</tr>
<tr>
<td>Type of adhesive</td>
<td>crosslinkable polyurethane</td>
</tr>
<tr>
<td>Type of liner</td>
<td>PE-coated paper</td>
</tr>
<tr>
<td>Bonding strength (push-out)</td>
<td>3 N/mm²</td>
</tr>
</tbody>
</table>
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**Product Information**

**Additional Information**

Technical recommendations:

tesa® XPU 8702 is not self adhesive. It is activated by heat and pressure over a certain interval. The following values are recommendations for bond line parameters to start with.

1. **Pre-lamination:**
   During pre-lamination, laminate the adhesive tape onto the first component.

   **Setting:**
   - Temperature¹ 55-65 °C
   - Pressure² 3 bar
   - Time 5 – 20 s

   Short-time exposure to 65 °C bond line temperature during pre-lamination does not impact final bonding potential.

2. **Bonding:**
   Remove the liner from tape after the pre-lamination step.
   Position the second component. Apply temperature and pressure for the bonding time to reach sufficient bonding strength.

   **2.1. PC/PC:**
   **Setting:**
   - Temperature¹ 80 – 140 °C
   - Pressure² 5 bar
   - Time 10 – 120 s

   **2.2. AL/PC:**
   **Setting:**
   - Temperature¹ 110 – 190 °C
   - Pressure² 5 bar
   - Time 20 – 120 s

   Short cycle times can be achieved at high bond line temperatures. For activation at low temperatures, increase the heat-press time. To reach maximum bonding strength, surfaces should be clean and dry. Allow at least 1-2 hours dwell-time after bonding before performance testing. Final bonding strength will be reached after 24 hours.

Bonding strength values were obtained under standard laboratory conditions.

(PC/PC: bonding conditions: temperature = 110 °C (120°C jig); pressure = 5 bar; time = 60 sec / AL/PC: bonding conditions: temperature = 170 °C (180°C jig); pressure = 5 bar; time = 20 sec.)

**Storage:** tesa® recommends storage in original packaging in cool and dry conditions.

¹ ‘Pre-lamination’ and ‘Bonding’ temperature refer to the data that is measured in the bond line.
² ‘Pre-lamination’ and ‘Bonding’ pressure refer to the force that is transferred from jig surface directly to the bonding area.

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