

58701

Product Information



25µm x-linkable polyurethane black HAF mounting tape

Product Description

tesa® XPU 58701 is a reactive mounting tape offering high bonding strength and elasticity after curing. This black double-sided tape has no backing. It is protected by a PE-coated paper liner, tesa® XPU 58701 is free of halogen according to IEC 61249-2-21 and compliant with current RoHS directive. At room temperature tesa® XPU 58701 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
- · Black design

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Application Fields

tesa® XPU 58701 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.

Product Construction

• Backing none • Type of liner PE-coated paper

Type of adhesive crosslinkable
Total thickness
25 μm

polyurethane

Properties/Performance Values

Bonding strength (push-out)
1.5 N/mm²



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Additional Information

Technical recommendations:

tesa® XPU 58701 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.

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 affect the final bonding potential.

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.

PC/PC:

Setting:

- Temperature¹ 80 140 °C
- Pressure² 5 bar
- Time 10 120 s

AL/PC:

Setting:

- Temperature 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.



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Bonding strength values were obtained under standard laboratory conditions.

PC/PC: bonding conditions: temperature = $110 \, ^{\circ}$ C ($120 \, ^{\circ}$ C jig); pressure = $5 \, \text{bar}$; time = $60 \, \text{sec}$

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

'Pre-lamination' and 'Bonding' temperature refer to the data that is measured in the bond line.

'Pre-lamination' and 'Bonding' pressure refer to the force that is transferred from jig surface directly to the bonding area.

Disclaimer

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