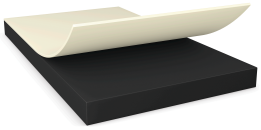
tesa® XPU 58702

Product Information



50µm x-linkable polyurethane black HAF mounting tape

Product Description

tesa ® XPU 58702 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 58702 is free of halogen according to IEC 61249-2-21 and compliant with current RoHS directive. At room temperature tesa ® XPU 58702 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

Application Fields

tesa ® XPU 58702 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

Type of liner	PE-coated paper
Backing material	none
Type of adhesive	crosslinkable polyurethane
Total thickness	50 µm
Color	black

Properties/Performance Values

Bonding strength (push-out)	2.5 N/mm^2

Additional Information

Technical recommendations:

For latest information on this product please visit http://l.tesa.com/?ip=58702

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tesa® XPU 58702 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:

Temperature[1] 55-65°C

Pressure[2] 3 bar

Time 5 – 20s

Short-time exposure to 65°C bond line temperature during pre-lamination does not affect the 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:

• Temperature[1] 80 – 140°C

• Pressure[2] 5 bar

• Time 10 – 120s

2.2. AL/PC: Setting:

• Temperature[1] 110 – 190°C

• Pressure[2] 5 bar

• Time 20 – 120s

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

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were obtained under standard laboratory conditions. PC/PC: bonding conditions: temperature = 110°C (120°C jig); pressure = 5 bar; time = 60 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

tesa® products prove their impressive quality day in, day out in demanding conditions and are regularly subjected to strict controls. All information and recommendations are provided to the best of our knowledge on the basis of our practical experience. Nevertheless tesa SE can make no warranties, express or implied, including, but not limited to any implied warranty of merchantability or fitness for a particular purpose. Therefore, the user is responsible for determining whether the tesa® product is fit for a particular purpose and suitable for the user’s method of application. If you are in any doubt, our technical support staff will be glad to support you.

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