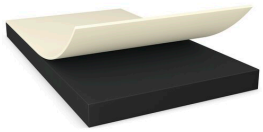
tesa HAF® 58476

Product Information



150 µm black reactive structural bonding film

Product Description

tesa HAF® 58476 is a reactive heat activated structural bonding film based on phenolic resin and nitrile rubber. This black double sided tape has no backing. It is protected by a strong paper liner.

It is activated by heat and pressure applied during the assembly process.

Product Features

- Extremely high performance, even on small bonding areas and thin design gaps
- Reliable and ageing-resistant bonds
- Very low oozing ratio
- Suitable for long-term applications that are exposed to heavy stress
- Free of halogen and compliant with current ROHS standards

Application Fields

tesa HAF® 58476 is especially recommended for bonding of metal components to metal surfaces or heat resistant plastics, e.g. SUS or AL to PI, PMMA or ABS:

- Constructive bonding inside electronic devices
- FPC bonding
- Button fixation
- Camera lens and bezel mounting
- Bonding of decorative metal 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	• Total thickness	150 µm
• Type of adhesive	nitrile rubber / phenolic resin	• Color	black
• Type of liner	glassine		

Properties/Performance Values

• Bonding strength (push-out)	11 N/mm^2

Additional Information

Technical recommendations:

For latest information on this product please visit http://l.tesa.com/?ip=58476

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Additional Information

tesa HAF® 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, the adhesive tape is laminated onto the first substrate. This step does not affect the shelf life time of the adhesive tape. Pre-laminated components can be stored over the same period of time as the adhesive tape.

setting:

- Temperature[1]: 95-120 °C
- Pressure[2]: 2-6 bar
- Time: 3-10 s

2. Bonding:

Remove the liner from tape after pre-lamination step. Place the pre-laminated part onto the second substrate. Apply sufficient temperature while applying pressure for the bonding time to reach sufficient bonding strength.

setting:

- Temperature[1]: 120-250 °C
- Pressure[2]: 5-30 bar
- Time: 5-180 s

Temperature, pressure and time will depend upon the type and thickness of the substrates. Generally, thicker substrates or lower bonding temperatures will require longer bonding times. To achieve optimum performance a cooling step (while applying pressure) directly after the bonding step is recommended.

[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 transformed from jig surface directly to the bonding area.

Bonding strength values were obtained under standard laboratory conditions. (Material: etched aluminum test specimen / bonding conditions: temperature = 180 °C; pressure = 10 bar; time = 7 sec).

To reach maximum bonding strength surfaces should be clean and dry. Storage conditions according to tesa HAF® shelf life concept.

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Product Information

Disclaimer

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