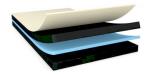


tesa HAF® 58494

Product Information



300 µm double sided black reactive HAF mounting tape

Product Description

tesa HAF® 58494 is a reactive heat activated structural bonding film based on phenolic resin and nitrile rubber. This black double sided tape has a PET backing. It is protected by a strong paper liner

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

Sustainable Aspects

- · Extremely high performance, even on small bonding areas and thin design gaps
- · Reliable and ageing-resistant bonds
- · Extremely low oozing ratio
- · Very good dimension stability and easy die-cut handling
- · PET backing provides barrier function in mesh bonding applications
- Suitable for long-term applications that are exposed to heavy stress
- · Free of halogen and compliant with current ROHS standards

Product Features

- Extremely high performance, even on small bonding areas and thin design gaps
- Reliable and ageing-resistant bonds
- · Extremely low oozing ratio
- · Very good dimension stability and easy die-cut handling
- PET backing provides barrier function in mesh bonding applications
- · Suitable for long-term applications that are exposed to heavy stress
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Application Fields

tesa HAF $^{\circ}$ 58494 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
- · Speaker mesh bonding
- FPC bonding
- · Button fixation
- · Camera lens and bezel mounting
- Bonding of decorative metal components



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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

phenolic resin

• Type of liner coated paper

Properties/Performance Values

Activation temperature
120 °C
Bonding strength (push-out)
11 N/mm²

Additional Information

Technical recommendations:

tesa HAF® 58494 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:

• Temperature¹: 95-120 °C

Pressure²: 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:

• Temperature¹: 120-250 °C

• Pressure²: 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.



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- 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.

Disclaimer

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