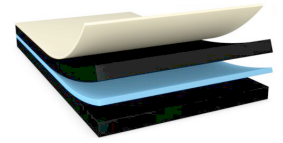


# tesa HAF® 58494

## 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® 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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## Product Information

### 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	PET	• Total thickness	300 µm
• Type of adhesive	nitrile rubber / phenolic resin	• Color	black
• Type of liner	coated paper		

### Properties/Performance Values

• Activation temperature	120 °C	• Bonding strength (push-out)	11 N/mm <sup>2</sup>
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### 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:

- Temperature<sup>1</sup>: 95-120 °C
- Pressure<sup>2</sup>: 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<sup>1</sup>: 120-250 °C
- Pressure<sup>2</sup>: 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.

For latest information on this product please visit <http://l.tesa.com/?ip=58494>

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### Additional Information

<sup>1</sup> 'Pre-lamination' and 'Bonding' temperature refer to the data that is measured in the bond line.

<sup>2</sup> '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: SUS test specimen / bonding conditions: temperature = 180 °C; pressure = 10 bar; time = 60 sec).

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

### Disclaimer

tesa<sup>®</sup> 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<sup>®</sup> 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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