



# tesa HAF<sup>®</sup> 58470

## Product Information

50µm black reactive HAF mounting tape

### Product Description

tesa<sup>®</sup> HAF 58470 is a reactive heat activated film based on phenolic resin and nitrile rubber. This black double sided tape has no backing. It is protected by a strong paper liner.

tesa<sup>®</sup> HAF 58470 is free of halogen and compliant with current ROHS standards.

At room temperature tesa<sup>®</sup> HAF 58470 is not tacky. It is activated by heat and pressure applied during the assembly process.

#### Special Features:

- Reliable and ageing-resistant bonds
- Extremely high performance, even on small bonding areas and thin design gaps
- Very low oozing ratio
- Suitable for long-term applications that are exposed to heavy stress
- Bonds remain elastic

### Application Fields

tesa<sup>®</sup> HAF 58470 is especially recommended for bonding of metal components to various plastic or metal surfaces, e.g. SUS or AL to PMMA, PC or ABS:

- \*Constructive bonding inside electronic devices
- \*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 | 50 µm |
| • Type of adhesive | nitrile rubber / phenolic resin | • Color           | black |
| • Type of liner    | glassine                        |                   |       |

### Properties/Performance Values

- |                                    |                     |                               |                      |
|------------------------------------|---------------------|-------------------------------|----------------------|
| • Bonding strength (dynamic shear) | 7 N/mm <sup>2</sup> | • Bonding strength (push-out) | 11 N/mm <sup>2</sup> |
|------------------------------------|---------------------|-------------------------------|----------------------|

For latest information on this product please visit <http://l.tesa.com/?ip=58470>



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### Additional Information

Technical recommendations:

tesa<sup>®</sup> HAF 58470 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 metal 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 plastic part onto the metal component. 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

To achieve optimum performance a cooling step (while applying pressure) directly after the bonding step is recommended.

<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: etched aluminum test specimen / bonding conditions: temperature = 180 °C; pressure = 10 bar; time = 7 sec).

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### Additional Information

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

### Disclaimer

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