

# tesa HAF® 8478

## **Product Information**



## 200 µm amber reactive structural bonding film

# **Product Description**

tesa HAF® 8478 is a reactive heat activated structural bonding film based on phenolic resin and nitrile rubber. This amber 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® 8478 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**

phenolic resin

• Type of liner glassine

#### **Properties/Performance Values**

Bonding strength (push-out)
11 N/mm<sup>2</sup>

## **Additional Information**

Technical recommendations: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.



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#### **Additional Information**

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.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: 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® shelf life concept.

## Disclaimer

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