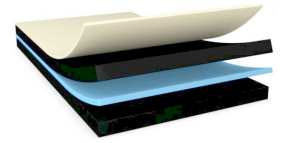




58493

Product Information



83µm double sided black reactive HAF mounting tape

Product Description

tesa® HAF 58493 is a reactive heat activated 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.

tesa® HAF 58493 is free of halogen and compliant with current ROHS standards.

At room temperature tesa® HAF 58493 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
- *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
- *Bonds remain elastic

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Application Fields

tesa® HAF 58493 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
- *Speaker mesh mounting
- *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

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Product Information

Technical Information (average values)

used for specification purposes.

Product Construction

• Backing	PETP	• Total thickness	83 µm
• Type of adhesive	nitrile rubber / phenolic resin	• Color	black
• Type of liner	glassine		

Properties/Performance Values

• Bonding strength	6 N/mm ²
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Additional Information

Technical recommendations:

tesa® HAF 58493 is not self adhesive. It is activated by heat and pressure over a certain interval. The following values are recommendations for machine 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.

Machine setting:

- Temperature¹ 90 – 120 °C
- Pressure² 2 – 6 bar
- Time 1 – 3 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.

Machine setting:

- Temperature¹ 180 – 220 °C
- Pressure² 2 – 10 bar
- Time 3 – 10 s

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 at the surface of heating jig.

² 'Pre-lamination' and 'Bonding' pressure refer to the force that is transformed from jig surface directly to the bonding area.



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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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