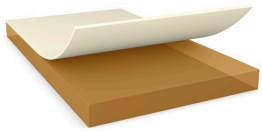
8471

Product Information



Heat Activated FilmSolutionsfor the Consumer Electronics Industry

Product Description

tesa® HAF 8471 is a thermosetting film based on phenolic resin and nitrile rubber. This brown double-sided tape has no backing. It is protected by a strong paper liner.

tesa® HAF 8471 is halogen-free and compliant with current ROHS standards.

At room temperature tesa® HAF 8471 is not tacky. It is activated by heat and pressure during defined intervals.

tesa® HAF 8471 enables extremely strong and age-resistant bonds between different materials.

tesa® HAF 8471 features:

- Excellent conformability for flat and narrow substrate surfaces
- Produces extremely low oozing ratio
- Reliable and age-resistant bonds between plastic and metal surfaces, even on very small bonding areas
- Suitable for long-term applications that are exposed to heavy stress
- Bonds remain elastic

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 8471 is especially recommended for bonding of metal components to various plastic or metal surfaces, e.g. SUS or AL to PMMA, PC or ABS:

- Bonding of metal logo to housing
- Constructive bonding inside handhelds

For latest information on this product please visit http://l.tesa.com/?ip=08471

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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	none	• Total thickness	30 µm 1.2 mils
• Type of adhesive	nitrile rubber / phenolic resin	• Color	amber
• Type of liner	glassine		

Properties/Performance Values

• Bonding strength	7 N/mm^2

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.

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[1] 95-120 °C
- Pressure[2] 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[1] 120-250 °C
- Pressure[2] 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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Product Information

Additional Information

[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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