



# 58480

## Product Information

50µm black low temperature reactive HAF mounting tape

### Product Description

tesa® Low Temperature Reactive (LTR) 58480 is a reactive mounting tape activated at moderate temperatures. This black double-sided tape has no backing. It is protected by a PE-coated paper liner.

It is activated by moderate heat and pressure applied during the assembly process.

### Product Features

- Extremely high bonding performance and reliability, even on slim bonding areas and thin design gaps
- Activated at low temperature and pressure
- Excellent shock resistance
- Sebum resistant
- Very low oozing ratio
- At room temperature tesa® LTR 58480 is not tacky.
- tesa® LTR 58480 is free of halogen and compliant with current RoHS directive.

### Application Fields

tesa® LTR 58480 is especially recommended for structural bonding of temperature sensitive substrates:

- Bonding of anodized aluminium
- Bonding of plastics
- Mounting of sensitive electronic parts

### 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 | low temperature activated reactive adhesive | • Color           | black |
| • Type of liner    | PE-coated paper                             |                   |       |

### Properties/Performance Values

- |                               |                       |
|-------------------------------|-----------------------|
| • Bonding strength (push-out) | 5.5 N/mm <sup>2</sup> |
|-------------------------------|-----------------------|

### Additional Information

Technical recommendations:

For latest information on this product please visit <http://l.tesa.com/?ip=58480>



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tesa® LTR 58480 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, laminate the adhesive tape onto the first component.

Setting:

\* Temperature<sup>1</sup> 50 – 60 °C

\* Pressure<sup>2</sup> 1 – 3 bar

\* Time 5 – 20 s

Short-time exposure to 60°C bond line temperature during pre-lamination does not impact final bonding potential.

#### 2. Bonding:

Remove the liner from tape after the pre-lamination step.

Position the second component. Apply temperature and pressure for the bonding time to reach sufficient bonding strength.

Setting:

\* Temperature<sup>1</sup> 75 – 110 °C

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\* Pressure<sup>2</sup> 2 – 5 bar

\* Time 10 – 480 s

Short cycle times can be achieved at 110 °C bond line temperature. For activation at lower temperatures, increase the heat-press time or combine a short heat-press step with oven curing.

To reach maximum bonding strength, surfaces should be clean and dry. Allow at least 1-2 hours dwell-time after bonding before performance testing. Final bonding strength will be reached after 24 hours.

Bonding strength values were obtained under standard laboratory conditions (Material: PC/PC; bonding conditions: temperature (jig) = 90 °C; pressure = 5 bar; time = 120 sec).

#### Storage:

tesa recommends storage in original packaging in cool and dry conditions.

Low Temperature Reactive should not be exposed to more than 35°C before bonding (during transport, storage and converting).

The shelf life is 15 months after coating date. For the actual shelf life please refer to the best before date on the label in the log roll core.

<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 transferred from jig surface directly to the bonding area.

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### Disclaimer

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