



Adhesive tape
solutions for consumer
electronics

Enabling the future of consumer electronic devices

About us



Qualified experience and individual support

As a leading adhesive manufacturer in the electronics industry, we offer a wide range of customized adhesive tapes for smartphones, tablets, and other electronic devices. We work continuously to develop new products to better serve you and your customers in this fast-moving and innovative industry.

You and your suppliers are our priority. Our team of experts – from sales offices, R&D centers, and manufacturing facilities – is available globally to support you locally. In particular, our Customer Solution Center with its technical experts is there to offer you the individual support you need. Our state-of-the-art facility with extensive equipment is at your disposal to find the adhesive solution for your needs.

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Your complete partner

Solutions that go beyond tape

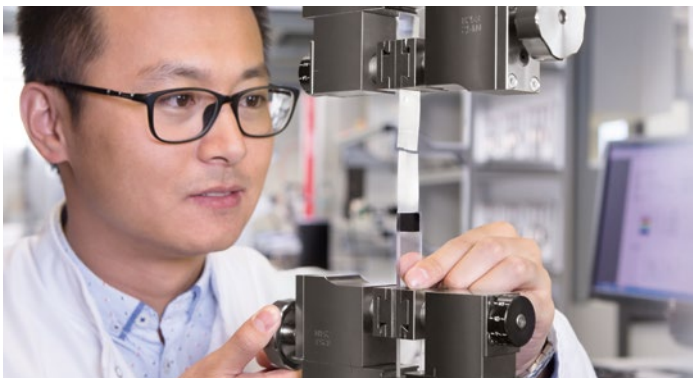
Every project comes with new and individual challenges. We overcome these challenges by partnering with you to create unique and specialized products that meet and exceed your customers' expectations. Our capability goes beyond tape, as we also offer a comprehensive technical product package.



Our labs and technical experts

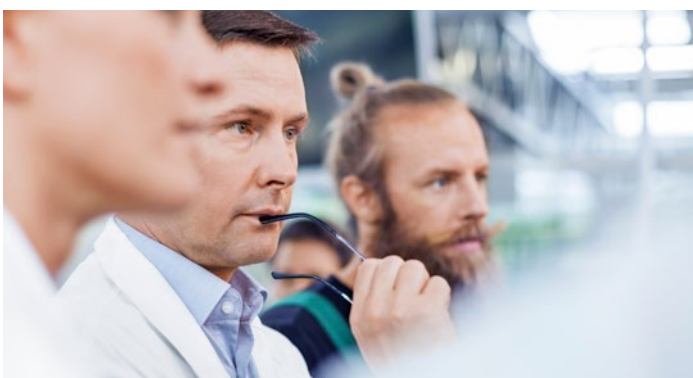
With our extensive experience in adhesive technology, we have developed a large portfolio of adhesive products for electronics applications.

Our technical experts will support you throughout your entire product development process and help you find the optimal solution for your requirements.



On-site support

We provide individual project support backed up by application engineers and research and development resources. Our technical experts in our Customer Solution Center offer on-site support and evaluation of your individual application under laboratory conditions.



Contact us

Our local experts and engineers are just a phone call away to support you with:

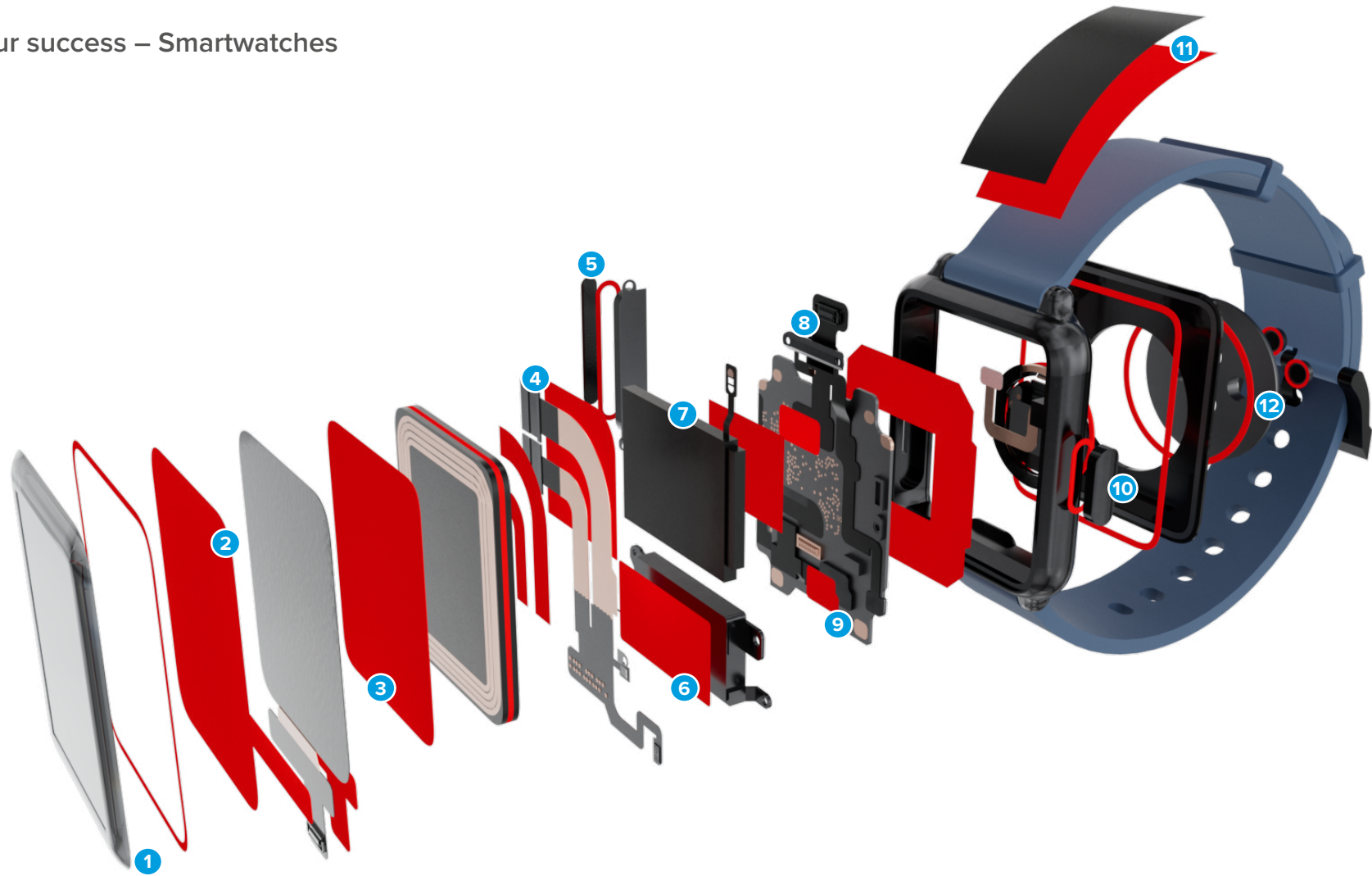
- Process-simulation studies
- Assistance at your manufacturing site
- State-of-the-art testing equipment
- Tests under a wide range of environmental conditions
- Customized tests with customer substrates

Contact us and benefit from a strong partnership.

Tapes for your success – Smartphones

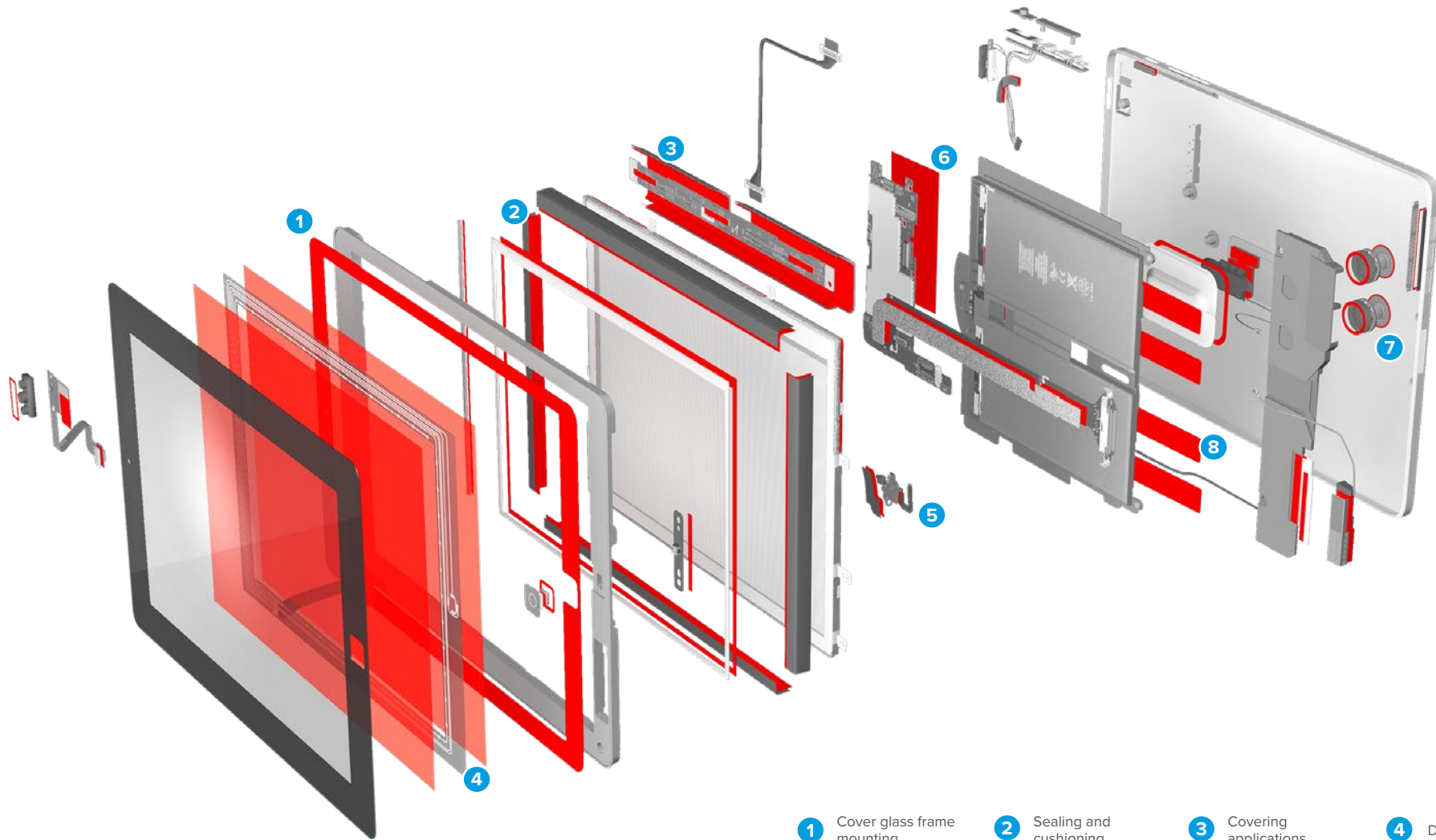


Tapes for your success – Smartwatches



- | | | | | | |
|------------------------------|----------------------------------|------------------------------------|---------------------------------|-------------------------------|---|
| 1 Cover lens mounting | 2 Display lamination | 3 Display bottom lamination | 4 FPC & antenna mounting | 5 Mesh / vent mounting | 6 Covering and insulation |
| 7 Battery mounting | 8 Grounding and shielding | 9 Thermal management | 10 Side key mounting | 11 Soft goods mounting | 12 Back cover / sensor lens mounting |

Tapes for your success – Tablets



- 1 Cover glass frame mounting
- 2 Sealing and cushioning
- 3 Covering applications
- 4 Display lamination
- 5 Shielding and grounding
- 6 Thermal management and graphite sheet lamination
- 7 Component mounting
- 8 Battery mounting

We are strongly committed to sustainability

Sustainability and performance go hand in hand

Many of our customers embrace our commitment to sustainable business, and we are proud to showcase our more sustainable product developments that enable technological progress. At tesa, we believe that quality, innovation, performance, and sustainability all go together in this journey. Therefore, our assortment does not compromise the reliability and state-of-the-art bonding capabilities our customers rely on.

More than six hundred scientists, engineers, and product developers at tesa are exploring ways to improve the sustainability of our products. We are expanding our use of recycled and bio-based materials across all our solutions, for example our assortment of foam, film and electrically conductive tapes for consumer electronic applications.

Additionally, we are enabling easy repairability and recyclability of electronic devices with our innovative technologies and solutions. Production-wise we focus on solvent-free production processes and technology to reuse solvents.

Want to know more about sustainability at tesa? Klick the QR code!



Reduction of emissions



Tackling the global climate crisis and accelerating positive change are central elements of our commitment. Our mission to reduce global emissions includes upstream and downstream processes as well as our own production. Green energy is a key pillar of our commitment. Since 2020, we have sourced 100 percent of our purchased electricity from renewable energy sources.

As a testimony to self-sustained clean energy procurement, we have newly installed photovoltaic systems in tesa plants Offenburg and Haiphong that cover up to 25% of the plants' electricity demand.

Responsible sourcing



Responsible procurement is the first step in the life cycle of a sustainable product.

We want to ensure that fair working conditions and human rights as well as environmental protection are in place in the supply chain. To do this, we strictly enforce supplier traceability and high transparency of our value chain: certifying our raw materials, evaluating suppliers and participating in associations.

By 2030 at least 80% of our spend will go to suppliers that are aligned with our sustainability standards.

Use of recycled and bio-based materials



tesa has set itself the goal of significantly increasing product sustainability and is working on this every day.

In 2023, we have launched 8 more sustainable products for the electronics sector, and we are currently working on many more. In doing so, we are focusing on the reduction of non-recycled fossil plastics and will increasingly use recycled and bio-based materials.

We have a comprehensive carbon footprint database, and we are continuously improving our data quality. Additionally, we conduct external life cycle assessments to ensure a science-based approach.

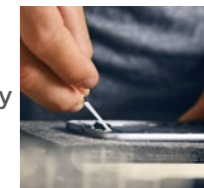
Circularity and reduction of waste



tesa will contribute to the circular economy and use resources as carefully as possible. First and foremost, this involves avoiding waste. Whenever this is not possible, we reduce it. If waste is unavoidable, we seek to reuse or recycle it by various means. By 2025, we want to eliminate all landfill disposal of production-related waste.

In 2023, we have made significant progress in reducing plastic film liner usage and initiated pilot projects with customers to collect and reuse plastic end-wall covers for log rolls.

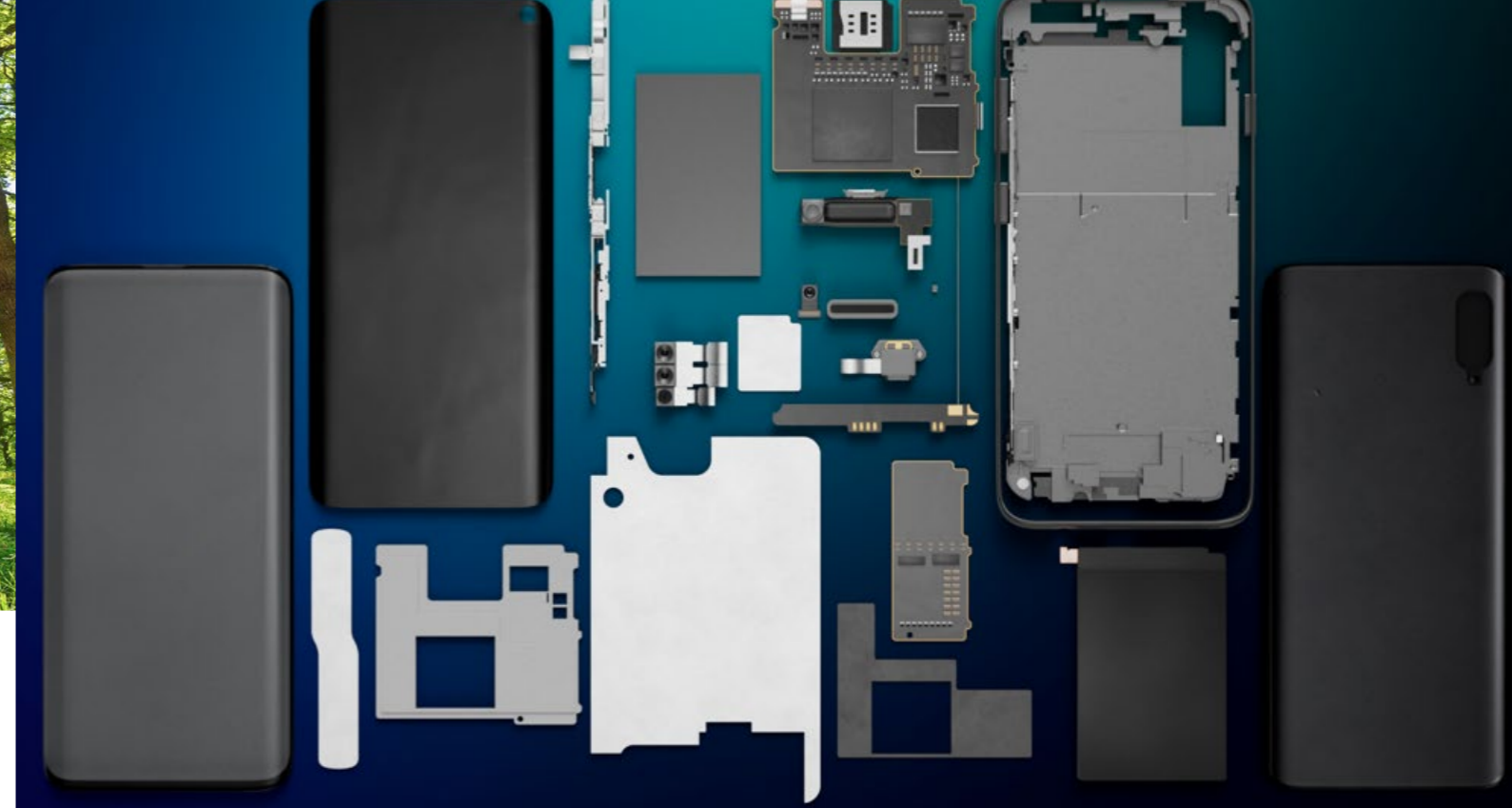
Enable sustainability at customer



Our versatile building blocks empower customers to improve reworkability in production, enhance repairability throughout the lifespan of devices, and achieve optimal recyclability after their life cycle.

tesa has developed the famous tape tesa® Bond & Detach in the last decade which enables mechanical release with residue-free removability. And tesa is now at the forefront of revolutionizing the industry with our groundbreaking "Debonding on Demand" adhesive tapes.

With an impressive portfolio of over 50 patents filed, we ensure reliable bonding performance, offer smart debonding options, and enable maximum design freedom for our customers.



Structural bonding solutions

The best reliability for the toughest demands

tesa® structural bonding solutions provide high bonding performance to a wide variety of substrates. They withstand the harshest conditions by combining outstanding chemical and aging resistance. The processing of these adhesive systems is simplified due to excellent die cuttability, immediate handling stability after activation, and low oozing.

Heat-activated films

tesa® HAF is a thermosetting adhesive system. An irreversible cross-linking reaction is initiated by heat and pressure starting at temperatures above 120°C, resulting in extremely strong bonds.

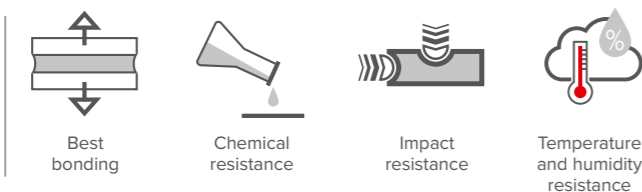
Low-temperature activated films

Our low-temperature reactive films tesa® LTR and tesa® LTC have been designed for activation at moderate temperatures. The cross-linking starts at a bond-line temperature above 75°C. tesa® LTT is a low temperature thermoplastic film designed for soft goods assembly requiring low processing temperatures.

Light-curing tapes

tesa® UV epoxy and tesa® L-tape are our latest developments that will cure at room temperature when exposed to light. They achieve significantly higher bonding strengths compared to PSAs. They come with high initial tack and immediate holding strength after bonding.

Features



Typical applications



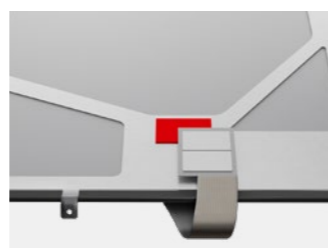
Component mounting



Cover lens mounting



Soft goods bonding



FPC mounting

Assortment overview

| | Heat-activated films | Low-temperature activated films | | | Light-curing tapes | |
|------------------------------------|---|---|--|-------------------------------|---|---|
| | tesa® HAF | tesa® LTR | tesa® LTC | tesa® LTT | tesa® UV epoxy ^{NEW} | tesa® L-tape ^{NEW} |
| Design | | | | | | |
| Color | Black, amber | Black, white, translucent | Black | Translucent | White | Translucent |
| Adhesive | Nitrile rubber/phenolic resin | Cross-linkable polyurethane | Cross-linkable polyurethane | Thermoplastic polyurethane | Light curable | Light curable |
| Activation temperature [°C] | >120 | >75 | >75 | >80 | Room temperature | Room temperature |
| Special features | Temperature resistance, chemical resistance | Impact resistance, wettability on fabrics | Impact resistance, chemical resistance | High peel adhesion to fabrics | Activation at room temperature, reworkability | Activation at room temperature, impact resistance |
| Thickness | 10 µm | ● 58469 | | | | |
| | 20 µm | ● 58477 | | | | |
| | 25 µm | | | | | |
| | 30 µm | ● 58471 ● 8471 | ○ 8711 | | ○ 8741 | |
| | 50 µm | ● 58470 | ● 58480 ○ 8710 ○ 8722 | ● 58722 | ○ 8742 | ○ 8692 |
| | 60 µm | ● 8472 | | | | |
| | 80 µm | ● 58473 ● 8473 | | | | |
| | 100 µm | ● 58474 ● 8474 | ● 58484 ○ 8714 | ● 58724 | | ○ 8684 ○ 8694 |
| | 125 µm | ● 58475 ● 8475 | | | | |
| | 150 µm | ● 58476 ● 8476 | ● 58486 | | | |
| 200 µm | ● 58478 ● 8478 | ● 58488 | | | ○ 8698 | |
| 300 µm | | ● 58489 | | | | |
| Product performance | Reference product | ● 58474 | ● 58484 | ● 58724 | ○ 8742** | ○ 8684 ○ 8694 |
| | Reference substrate | SUS/SUS | PC/PC | Al/Al | PC/PC | PC/PC Al/PC |
| | Push-out [MPa] | >5.5 | >5.5 | >4.0 | >2.5 | >2.5 >3.0 |
| | DuPont [J; xy/z] | >0.5 | >4.0 | >1.0 | n.a. | >0.5 >1.0 |
| | Reliability* | ●●●● | ●●● | ●●●● | ●● | ●●● ●●●● |
| | Chemical resistance* | ●●●● | ●● | ●●● | ● | ●● ●● |

* Assessment is done in relation to other products in this assortment

** Deviating thickness

● Amber ○ Translucent ○ White ● Black

Bond & Detach®



Stretch-release tapes for residue-free removability

Our Bond & Detach® solutions have revolutionized the removability of adhesives. This tape enables the permanent mounting of components with the option of removing them without residues. Bond & Detach® uses a unique adhesive technology for demanding bonding applications, that can be removed without leaving any residue by stretching it.

The patented technology was developed by tesa and offers the possibility of simple and secure debonding during the entire product life cycle – from production to end of life. It can also be used for temporary fixation during production processes or transportation. In addition, the whole assortment provides good impact resistance and bonding strength, even on LSE substrates.

Features

Fast and residue-free removal

High bonding

Impact resistance

LSE performance

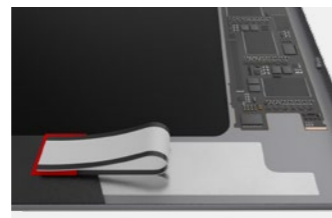
Typical applications



Battery mounting in mobile devices



Removable mounting of devices or accessories



Temporary fixation of components



Mounting of valuable components

Assortment overview

| | tesa® 704xx/703/706xx | tesa® 672xx | tesa® 770xx | tesa® 648xx | tesa® 705xx | |
|------------------------------|---|-------------------------------|------------------------------------|------------------------------------|----------------------------------|-----------|
| Design | | | | | | |
| Color | White, transparent, black | White | Translucent white | White | White | |
| Adhesive | Specialty | Specialty | Specialty | Specialty | Specialty | |
| Backing | - | Stretchable PU | Stretchable specialty | Stretchable specialty | - | |
| Special features | Bonding strength, easy activation | High impact resistance | Impact resistance, tear resistance | Impact resistance, tear resistance | Anti-repulsion, temp. resistance | |
| Thickness | 80 µm | | | | | |
| | 100 µm | ○ 70410 ● 70610 | ○ 67208** | | | |
| | 150 µm | ○ 70415 ● 70615 | ○ 67215 | ○ 77010 | ○ 64810** | |
| | 175 µm | | | ○ 77015 | ○ 64815 ○ 64816 | |
| | 200 µm | ○ 70420 ● 70620 | | ○ 77017 | | |
| | 250 µm | ○ 70425 ● 70625 | ○ 67225 | | ○ 64820 | |
| | 300 µm | ○ 70430 ● 70630 | | | ○ 64825 | ○ 70525 |
| | 350 µm | ● 70635 | | | ○ 64830 | |
| | 400 µm | ○ 70440 ● 70640 | | | | |
| | 500 µm | ○ 70350 ● 70650 | x | | | ○ 70550 |
| | 650 µm | ○ 70465 ● 70665 | | | | |
| | 800 µm | ○ 70480 ● 70680 | | | | |
| | 1,000 µm | ○ 70499 ● 70699 | | | | |
| 1,300 µm | ● 70697 | | | | | |
| Product performance | Reference product | ○ 70415 ○ 70315 ● 70615 | ○ 67215 | ○ 77015 | ○ 64815 | ○ 70525* |
| | Peel adhesion [N/cm; initial/ultimate] | | | | | |
| | SUS | 13.0/13.0 | 9.0/9.0 | 10.0/10.0 | 11.0/11.0 | 13.0/13.0 |
| | PE | 7.0/7.0 | 6.0/6.0 | 7.0/8.0 | 8.0/8.0 | 9.0/9.0 |
| | DuPont [J; xy/z] | 0.7/0.3 | 1.1/0.8 | 1.1/0.8 | 1.0/0.7 | 1.0/0.7 |
| Tumbler [cycles] | Upon request | >500 | 500 | 500 | Upon request | |
| Removing force [N/cm] | 4.0 | 5.0 | 4.0 | 4.0 | 6.0 | |

* Deviating thickness
** Upon request

○ Transparent ○ Translucent ○ White ● Black

Acrylic foam tapes

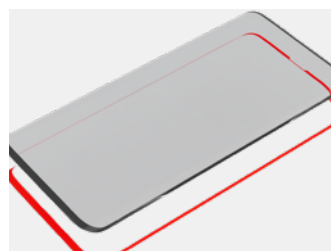
For applications with extreme requirements

Our acrylic foam tape assortment is especially designed for demanding applications in the electronics industry and is distinguished by its very special bonding capabilities. The high bonding performance is possible due to the tape's viscoelasticity: elastic and viscous characteristics provide inner strength and relax mechanical stresses. The use of highly innovative technologies and special acrylic adhesive systems together with the viscoelastic nature of acrylic foams create multiple benefits like impact resistance, high bonding strength, and waterproofing for electronic devices for the entire life cycle of the product.

Features

- High bonding
- Impact resistance
- Waterproofing
- Chemical resistance

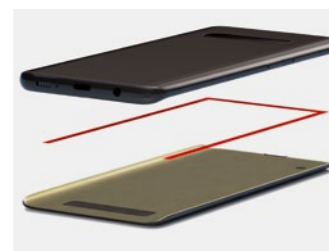
Typical applications



Cover glass frame mounting



Back cover mounting



Display bottom mounting



Cover lens mounting

Assortment overview

| | tesa® 751xx | tesa® 754xx/756xx | tesa® 6108x | tesa® 760xx ^{NEW} | tesa® 7588x ^{NEW} | tesa® 757xx |
|---|-------------------------------|---------------------|---|--|----------------------------|----------------------|
| Design | | | | | | |
| Color | Black | Black | Black | Black | Black | Black, white |
| Adhesive | Modified acrylic | Modified acrylic | Tackified acrylic | Tackified acrylic (66% bio-based carbon content) | Acrylic | Modified acrylic |
| Backing | - | - | AC foam | - | - | PET |
| Special features | Outstanding impact resistance | Outstanding bonding | Easy activation, inner force resistance | Balanced performance, high bio content | Chemical resistance | Balanced performance |
| 50 µm | | ● 75405 | | | ● 75881 | |
| 100 µm | | ● 75410 | | ● 76010 | ● 75882 | ● 75710 |
| 150 µm | | ● 75415 | | ● 76015 | ● 75883 | ● 75715 |
| 200 µm | ● 75120 | ● 75620 | | ● 76020 | ● 75884 | ● 75720 ○ 75743 |
| 250 µm | ● 75125 | ● 75625 | | | | ● 75725 ○ 75745 |
| 300 µm | ● 75130 | ● 75630 | ● 61086 | | | ● 75730 |
| 350 µm | | ● 75635 | ● 61087 | | | |
| 400 µm | | ● 75640 | ● 61088 | | | |
| 450 µm | | ● 75645 | | | | |
| 500 µm | | ● 75650 | | | | |
| Reference product | ● 75120 | ● 75620 | ● 61086 | ● 76020 | ● 75884 | ● 75720 |
| Peel adhesion [N/cm; initial/ultimate] | 13.0/15.0 | 15.5/17.0 | 15.5/17.5 | 11.0/12.0 | 8.0/10.0 | 14.0/15.0 |
| Push-out [N] | 300 | 225 | 215 | 120 | 185 | 205 |
| DuPont [J; xy/z] | 1.4/1.2 | 1.3/1.0 | 1.6/1.3 | 1.0/0.8 | 1.4/1.2 | 0.9/0.8 |
| Removability* | ●● | ● | ●● | ●● | ● | ●●● |

* Assessment is done in relation to other products in this assortment

○ White ● Black

Your partner for co-development

We have more options available in our portfolio, and by partnering with you we can create unique and specialized products that meet your individual demands. **Simply write to us or contact your local representative: electronics@tesa.com**

PE foam tapes



For challenging applications

PE foam tapes have long proven their value to the electronics industry. Certain properties such as impact resistance, bonding strength, and waterproofing are offered by all series in our PE foam range. In this section we present a selection of our PE foam solutions focusing on different series' specific performance features. If you require more information than what we have provided here, please contact your local representative.

Features

High bonding

Impact resistance

Waterproofing

Typical applications



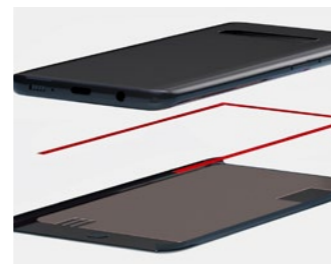
Cover glass frame mounting



Back cover mounting



Camera lens mounting



Display bottom mounting

Assortment overview

| | tesa® 6208x | tesa® 668xx | tesa® 626xx | tesa® 6216x | tesa® 66425 | |
|----------------------------|---|-----------------------------------|---|--------------------|----------------------------------|----------------------|
| Design | | | | | | |
| Color | Black | Black, white | Black | Black | Black | |
| Adhesive | Acrylic | Acrylic | Acrylic | Special | Acrylic | |
| Backing | PE foam | PE foam | PE Foam (partly with PET reinforcement) | PE foam | PE Foam (with PET reinforcement) | |
| Special features | Gap closing, shear resistance | Anti-repulsion, impact resistance | Bonding, conformability | Fast heat removal | Cuttable for rework | |
| Thickness | 150 µm | ● 62082 | ● 66822 | | | |
| | 200 µm | ● 62084 | ● 66824 | ● 62624 | | |
| | 250 µm | ● 62085 | ● 66825 | ● 62625 ● 62645 | | |
| | 280 µm | | | | ● 66425 | |
| | 300 µm | ● 62086 | ● 66826 | ● 62626 ● 62646 | ● 62166 | |
| | 350 µm | ● 62087 | | | | |
| | 400 µm | ● 62088 | ● 66828 | | | |
| | Reference product | ● 62086 | ● 66826 | ● 62626 | ● 62166 | ● 66425 |
| Product performance | Peel adhesion [N/cm; initial/ultimate] | 11.5/13.5 | 12.5/14.5 | 13.0/16.0 | Provided per request | Provided per request |
| | SUS | | | | | |
| | PC | 11/14.5 | 12.5/16.0 | 15.0/16.0 | Provided per request | Provided per request |
| | Push-out [N] | 220 | 252 | 180 | 180 | 210 |
| | DuPont [J; xy/z] | 0.52/0.5 | 0.88/0.77 | 0.48/0.42 | 0.55/0.65 | 0.49/0.47 |
| | Compression force at 25% [kPa] | 365 | 515 | 200 | 400 | 320 |
| Reworkability* | ●●● | ●●● | ● | ●●●● | ●●●● | |
| Anti-repulsion* | ●●●● | ●●● | ● | ● | ●● | |

* Assessment is done in relation to other products in this assortment

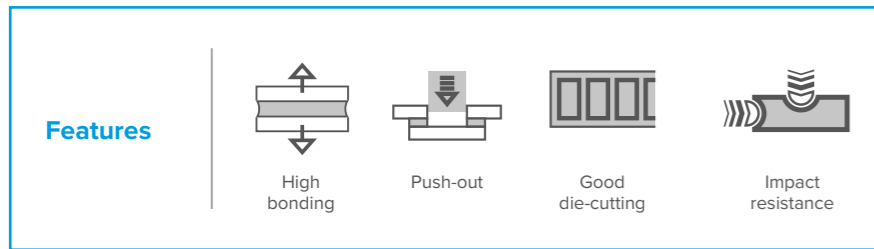
● Black



Double-sided film tapes

High performance profile

Our high performance profile tapes are the spearhead of our film tapes assortment. All series in this category are characterized by superior bonding performance, which is expressed in peel adhesion, push-out and shear resistance, and high impact resistance. This assortment is therefore used for demanding applications like lens and battery mounting. The PET backings used are very well suited to being die-cut.



Typical applications



Cover glass frame mounting



Battery mounting



Component mounting

Assortment overview

| | tesa® 613xx | tesa® 618xx | tesa® 6896x | |
|--|---------------------------------------|---|--------------------------------|-----------|
| Design | | | | |
| Color | Transparent, black | Black | Transparent | |
| Adhesive | Tackified acrylic | Modified acrylic | Specialty | |
| Backing | PET | PET | PET | |
| Special features | Push-out resistance, bonding strength | Push-out resistance, impact resistance, LSE performance | Quick bonding, LSE performance | |
| Thickness | 30 µm | | ○ 68960 | |
| | 50 µm | ○ 61305 ● 61350 | ○ 68962 | |
| | 100 µm | ○ 61360 ● 61365 | ● 61865 | ○ 68964 |
| | 125 µm | ○ 61370 ● 61375 | | |
| | 150 µm | ○ 61380 ● 61385 | ● 61885 | |
| | 200 µm | ○ 61390 ● 61395 | ● 61895 | |
| | 230 µm | ● 61345 | ● 61845 | |
| | 250 µm | ● 61325 | ● 61825 | |
| | 300 µm | ● 61315 | ● 61815 | |
| | Product performance | Reference product | ● 61365 ○ 61360 | ● 61865 |
| Peel adhesion [N/cm; SUS initial/ultimate] | | 13.7/16.5 | 11.0/12.0 | 17.0/17.5 |
| Push-out [N] | | 230 | 240 | 255 |
| DuPont [J; xy/z] | | 0.5/0.2 | 0.7/0.3 | 0.7/0.6 |

○ Transparent ● Black

Double-sided film tapes



Specialized performance profile

With this assortment, we created double-sided mounting tapes with unique adhesives focusing on the special requirements of certain applications in the electronics industry. Each series within this assortment focuses on a specific property needed in the market. In this section, you will find a selection of specialized film tapes. Our capabilities go beyond what is available here. Please contact our local representatives to discuss this further.

This assortment features

Anti-repulsion

Si/Ac differential

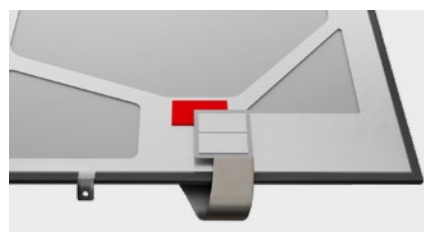
LSE performance

Chemical resistance

Impact resistance

Temperature resistance

Typical applications



FPC mounting



Rubber-foot mounting



Sensor mounting

Our specialized film tape solutions are suitable for applications with a high demand for a certain property like anti-repulsion, differential bonding performance, chemical resistance, reworkability, or light blocking. These tapes are suitable for a wide range of applications, from mounting (e.g. FPC, antenna, keypad, sensor) to processing and packaging applications.

Assortment overview

| | tesa® 6693x | tesa® 615xx | tesa® 612xx/6128x | tesa® 6881x | tesa® 885x | |
|----------------------------|---|-------------------------|------------------------------|-----------------------------------|------------------------|--------------|
| Design | | | | | | |
| Color | Transparent | Transparent | Black | Black | Translucent | |
| Adhesive | Tackified acrylic | Silicone/acrylic | Specialty | Tackified acrylic | Tackified acrylic | |
| Backing | PET | PET | PET | PET | Non-woven | |
| Special features | Anti-repulsion, easy activation | Si/Ac differential, LSE | Chemical resistance, shear | LSE, high tack, impact resistance | Temperature resistance | |
| Thickness | 30 µm | ○ 66930 | ○ 61526 | | ○ 8851 | |
| | 50 µm | ○ 66932 | ○ 61532 | ● 61250/61282 | ○ 8853 ○ 8857 | |
| | 80 µm | | | | ● 68813 | |
| | 100 µm | ○ 66934 | ○ 61528 | ● 61210/61284 | ● 68814 | ○ 8854 |
| | 140 µm | | ○ 61529 | | | |
| | 150 µm | | | ● 61215/61286 | | |
| | 200 µm | | ○ 61520 | ● 61220/61287 | ● 68817 | |
| 250 µm | | | ● 61288 | | | |
| Product performance | Reference product | ○ 66934 | ○ 61528 | ● 61210 | ● 68814 | ○ 8854 |
| | Peel adhesion [N/cm; initial/ultimate] | 10.7/11.6 | Si: 4.0/4.4 Ac: 11.3/12.6 | 12.4/13.2 | 13.5/14.0 | 8.3/9.5 |
| | Push-out [N] | 143 | Upon request | 260 | 130 | Upon request |
| | DuPont [J; xy/z] | 0.7/0.2 | Upon request | 1.1/0.7 | 0.9/0.5 | Upon request |

○ Transparent ● Black ○ Translucent

Solutions with sustainable contribution

We are continuously increasing our range of products with sustainable aspects to help our customers achieve their own sustainability goals. We are willing to offer products that have the lowest possible impact on the environment throughout their life cycle. The use of recycled and bio-based raw materials plays a particularly important role here. In our product development, we focus on the design and integration of various more sustainable building blocks in order to provide our customers with the greatest possible flexibility in the selection of products. Reach out to us, learn more about this exciting development, and become part of it!


Double-sided film tapes




Well-balanced performance profile

tesa® balanced-performance film tapes are a proven solution for mounting and lamination applications in the electronics industry. The balanced adhesive provides very good tack and bonding performance for many general applications. The PET backing enables easy handling of the tape during converting and manufacturing processes. With thicknesses from 5 µm to 250 µm, this assortment offers you a broad range and excellent flexibility.

Features



Balanced properties

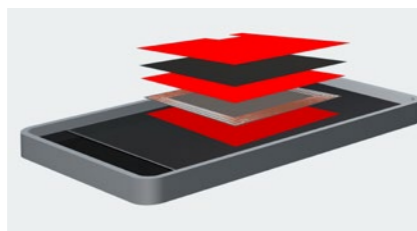


Easy die-cutting

Typical applications




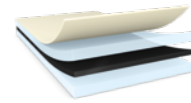
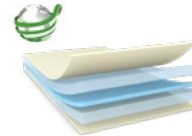





Battery mounting



Graphite sheet lamination

This assortment is widely used in the electronics industry for versatile mounting and lamination applications as well as for cushioning and gasket material bonding.

Assortment overview

| | tesa® 49xx | tesa® 519xx | tesa® 6887x |
|---|---|---|--|
| Design |  |  |  |
| Color | Transparent | Black | Transparent |
| Adhesive | Tackified acrylic | Tackified acrylic | Bio-based acrylic (75% bio-based carbon content) |
| Backing | PET | PET | PCR PET (100% PCR content) |
| 5 µm | ○ 4912 | | |
| 30 µm | ○ 4983 | ● 51983 |  ○ 68873 |
| 50 µm | ○ 4972 | ● 51972 |  ○ 68875 |
| 80 µm | ○ 4980 | ● 51980 | |
| 100 µm | ○ 4982 | ● 51982 |  ○ 68877 |
| 125 µm | ○ 4928 | ● 51928 | |
| 140 µm | ○ 4942 | | |
| 150 µm | | |  ○ 68878 |
| 160 µm | ○ 4967 | ● 51967 | |
| 200 µm | ○ 4965 | ● 51965 |  ○ 68879 |
| 250 µm | ○ 4926 | ● 51926 | |
| Reference product | ○ 4982 | ● 51982 | ○ 68877 |
| Peel adhesion [N/cm; initial/ultimate] | 11.0/11.7 | 11.0/11.7 | 12.6/12.8 |
| Push-out [N] | 230 | 230 | Upon request |
| DuPont [J; xy/z] | 0.5/0.2 | 0.5/0.2 | Upon request |

○ Transparent ● Black

Can't find the right solution?

We have more options available in our portfolio, and by partnering with you we can create unique and specialized products that meet your individual demands. **Simply write to us or contact your local representative: electronics@tesa.com**



Covering tapes

More functionality for electronic devices

Electronic components are evolving one generation after the other, just like our solutions for covering tape. Our portfolio consists of polyester and polyimide tapes.

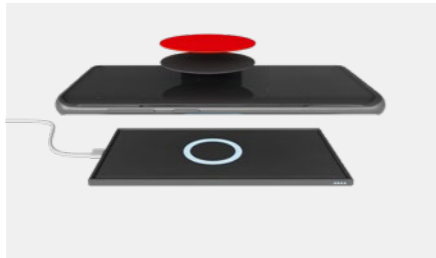
Features

- Anti-repulsion
- Light blocking
- High bonding
- Modern appearance

Typical applications



Light blocking in LCD backlight unit



Covering



Insulation on PCB and FPC

Assortment overview

| | tesa® 79xx | tesa® 71xx | tesa® 673xx | tesa® 663xx | |
|----------------------------|--|---|--|--|---------|
| Design | | | | | |
| Color | Matte black | Black | Matte black | Amber | |
| Adhesive | Black tackified acrylic | Black tackified acrylic | Tackified acrylic | Tackified acrylic | |
| Backing | Polyester | Polyester | PI | PI | |
| Special features | Modern design, anti-repulsion | Bonding strength, dielectric insulation | Heat resistance, dielectric insulation | Heat resistance, dielectric insulation | |
| Thickness | 5 µm | ● 7905 | | | |
| | 8 µm | | | | |
| | 10 µm | ● 7910 | | | |
| | 20 µm | ● 7920 | | ● 66320 | |
| | 30 µm | ● 7930 | | ● 66330 | |
| | 50 µm | ● 7950 | ● 7250 | ● 67350 | |
| | 60 µm | | ● 7160 | | |
| | 80 µm | | ● 7180 | | |
| | 100 µm | | ● 7100 | | |
| | Reference product | ● 7950 | ● 7250 | ● 67350 | ● 66330 |
| Product performance | Peel adhesion [N/cm; SUS initial ultimate] | 4.0 | 4.2 | 3.5 | 3.0 |
| | Light blocking [optical density] | 5.7 | >6 | 2.6 | n.a. |
| | Insulation [kV, dielectric breakdown voltage] | 5.5 | 5.0 | 3.6 | 3.6 |
| Anti-repulsion* | ●●● | Upon request | ●●● | ●●●● | |

* Assessment is done in relation to other products in this assortment

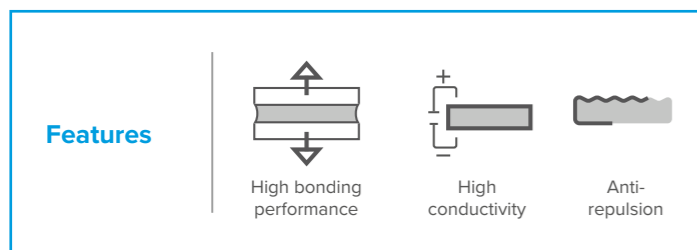
● Amber ● Matte/Natural black

Double-sided electrically conductive tapes

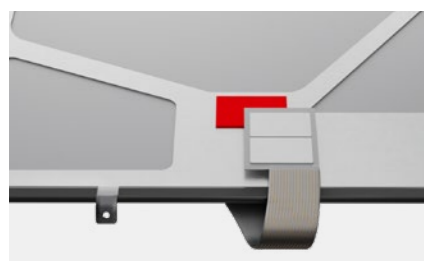
For applications requiring grounding

By offering a broad assortment of filled acrylic adhesive systems, with a balance between electrical conductivity and adhesive properties, we are able to provide the best solution for your requirements. Simply decide what is the most important for your application: bonding performance, conductivity, or a balance of both.

Our double-sided tapes are available with two different backings. The woven backing offers a higher tear resistance, very good dimensional stability, and better reworkability, while the nonwoven backing provides faster wetting, excellent conformability, and very good die cuttability.



Typical applications



FPC grounding



Component grounding

Assortment overview

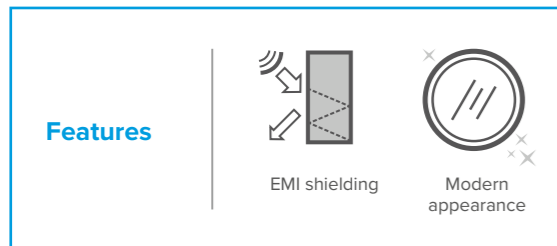
| | tesa® 6025x/6026x | tesa® 6036x | tesa® 6037x | tesa® 6038x | tesa® EC HAF 5845x | tesa® 6066x | tesa® 60250 |
|---|---------------------|--|--------------------------|---|---|------------------------------|-------------------------|
| Design | | | | | | | |
| Color | Gray | Gray | Black | Gray | Black | Gray | Gray |
| Adhesive | Conductive acrylic | Conductive acrylic | Conductive acrylic | Conductive acrylic | Conductive structural adhesive | Conductive bio-based acrylic | Conductive acrylic |
| Backing | Woven, non-woven | Woven | Woven, non-woven | Woven, non-woven | - | PCR PET conductive fabric | Woven |
| Special features | Balanced properties | High bonding strength, high conductivity | Outstanding conductivity | Outstanding bonding, repulsion resistance | Heat-activated structural bonding film, temperature and humidity resistance | Balanced properties | High appearance quality |
| 17 µm | ● 60267 | | | | | | |
| 25 µm | ● 60261 | | | | | | |
| 30 µm | | | ● 60371 | ● 60380 | ● 58451 | | ● 60250 |
| 35 µm | ● 60260 | | | | | | |
| 50 µm | ● 60262 | ● 60362 | ● 60372 | ● 60381 ● 60386 | ● 58452 | ● 60665 | |
| 55 µm | ● 60251 ● 60252 | | | | | | |
| 70 µm | ● 60253 | | | | | | |
| 100 µm | ● 60254 | ● 60364 | ● 60374 | ● 60384 ● 60388 | | ● 60667 | |
| 150 µm | ● 60255 | | | | | | |
| 200 µm | ● 60256 | | | | | | |
| 250 µm | ● 60257 | | | | | | |
| Reference product | ● 60252 ● 60262 | ● 60362 | ● 60372 | ● 60381 ● 60386 | ● 58452 | ● 60667 | ● 60250 |
| Peel adhesion [N/cm; initial/ultimate] | 5.4/8.3 | 7.0/8.0 | 4.3/5.6 | 8.0/10.0 | n.a. | | >5 |
| Dynamic shear [N] | n.a. | n.a. | n.a. | n.a. | >7 | | |
| Contact resistance [mΩ.inch²] | 0.05 | 0.01 | 0.01 | 0.06 | 0.05 | 0.05 | 0.05 |
| Surface resistance [mΩ.sq] | 0.2 | 0.1 | 0.1 | 0.3 | 0.5 | 0.2 | 0.2 |
| Shielding effectiveness [-dB] | >50 | >60 | >50 | >50 | ~40 | | |

● Black ● Gray

Single-sided electrically conductive tapes

For shielding and covering applications

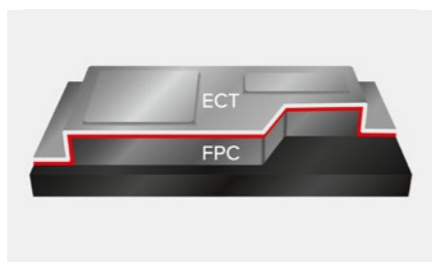
Covering and shielding applications are broad and have different requirements for conductivity, adhesion, and design. Our single-sided ECT assortment meets the latest requirements for shielding and appearance.



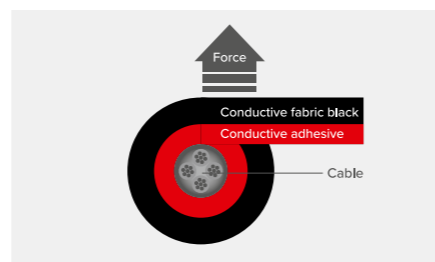
Typical applications



MLB covering



Component shielding



Wire wrapping

Assortment overview

| | tesa® 6023x | tesa® 6033x | tesa® 6053x | tesa® 6031x | tesa® 6034x | |
|----------------------------|---|--|--------------------|--|--|---------|
| Design | | | | | | |
| Color | Matte black | Matte black | Orange | Orange | Gray | |
| Adhesive | Conductive acrylic | Conductive acrylic | Conductive acrylic | Conductive acrylic | Conductive acrylic | |
| Backing | Fabric, copper | Copper | Copper | Copper | Fabric | |
| Special features | Modern, matte black design | Modern, matte black design with high shielding | Excellent bonding | Low-pressure activation, high conductivity | Low-pressure activation, high conductivity | |
| Thickness | 20 µm | ● 60332 | | | | |
| | 25 µm | ● 60231 | | | | |
| | 30 µm | | ● 60333 | ● 60537 | ● 60317 | |
| | 35 µm | ● 60232 | | | | |
| | 40 µm | | ● 60334 | | | |
| | 45 µm | ● 60238 | | | | |
| | 50 µm | | | ● 60538 | ● 60318 | ● 60348 |
| | 55 µm | ● 60234 | | | | |
| Reference product | ● 60232 | ● 60333 | ● 60537 | ● 60317 | ● 60347 | |
| Product performance | Peel adhesion [N/cm; SUS initial/ultimate] | 3.5/4.5 | 4.0 | 6.3/7.5 | 4.6/5.3 | 3.5/4.8 |
| | Contact resistance [mΩ.inch²] | 0.05 | 0.05 | 0.05 | 0.03 | 0.03 |
| | Surface resistance [mΩ.sq] | 0.2 | 0.1 | 0.2 | 0.2 | 0.2 |
| | Shielding effectiveness [-dB] | >50 | >70 | >70 | >70 | >60 |

● Matte black ● Gray ● Orange

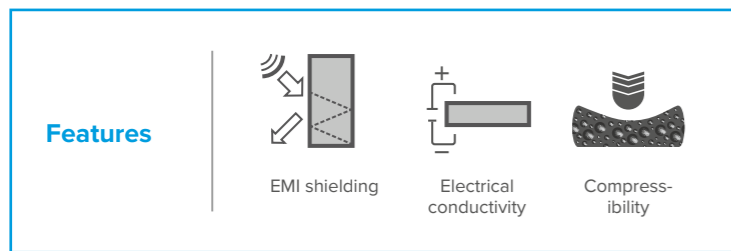
Didn't find what you were looking for?

We have more options available in our portfolio, and by partnering with you we can create unique and specialized products that meet your individual demands.

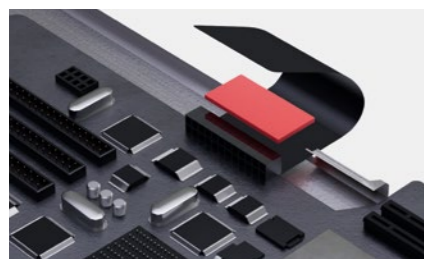
Single-sided electrically conductive foam tapes

For conductive gap filling

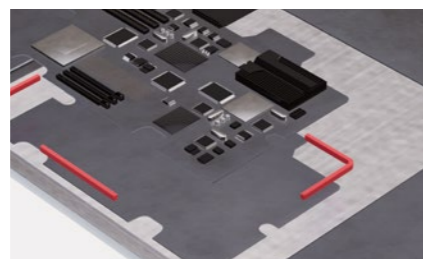
Our single-sided electrically conductive foam tapes can be used for shielding, grounding, and filling gaps. They will provide either outstanding conformability and recovery properties or very high abrasion resistance, depending on the foam material chosen. All series in this assortment have very good shock-absorbing and cushioning properties.



Typical applications



FPC grounding



FPC Shielding

Assortment overview

| | tesa® 6021x | tesa® 6068x | tesa® 6024x | |
|----------------------------|---|---------------------------|---------------------|---------|
| Design | | | | |
| Color | Gray | Gray | Gray | |
| Adhesive | Conductive acrylic | Conductive acrylic | Conductive acrylic | |
| Backing | Soft foam | Ultrasoft foam | Gasket foam | |
| Special features | Excellent electrical conductivity | Excellent compressibility | Abrasion resistance | |
| Thickness | 200 µm | ● 60213 | | |
| | 300 µm | ● 60214 | ● 60246 | |
| | 500 µm | | ● 60685 | |
| | 700 µm | | ● 60687 | |
| | 1,000 µm | | ● 60688 | |
| | 1,500 µm | ● 60217 | | |
| | 2,000 µm | ● 60218 | | |
| Reference product | ● 60214 | ● 60685 | ● 60248 | |
| Product performance | Peel adhesion [N/cm; SUS initial/ultimate] | 4.8/8.3 | 6.0/8.0 | 4.8/6.3 |
| | Contact resistance [mΩ.inch ²] | 0.03 | 0.03 | 0.03 |
| | Surface resistance [mΩ.sq] | 0.2 | 0.2 | 0.2 |
| | Shielding effectiveness [-dB] | >70 | >60 | >70 |
| | Compression force at 50% [N/cm ²] | <50 | <6 | <55 |
| | Recovery rate after 24h [%] | 90 | 96 | 96 |

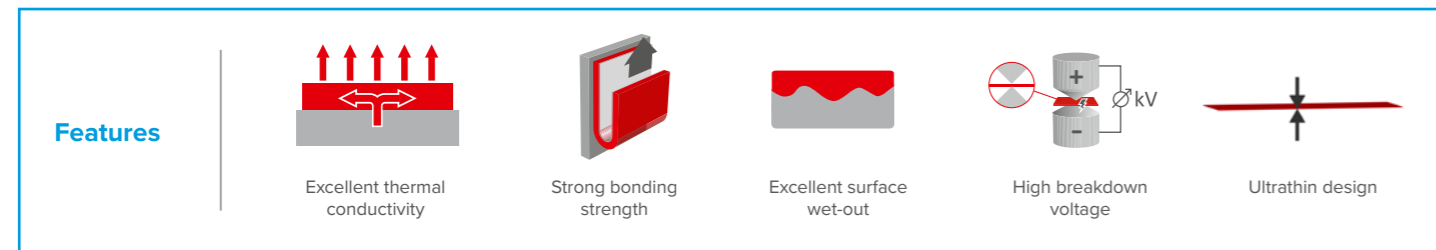
● Gray



Thermal management tapes

Keeping electronic devices cool

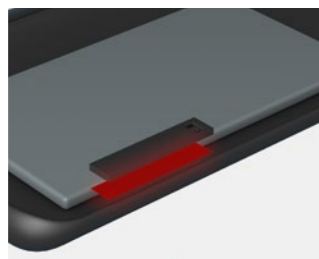
tesa® Thermal Management Tapes provides superior thermal transfer performance with excellent bonding properties. It delivers very good surface wet-out on substrates due to the transfer tape design which helps to maximize the thermal transfer efficiency in electronic devices. The available thickness range, which starts from ultrathin 10 µm and ends at 100 µm, offers more flexibility in the device design.



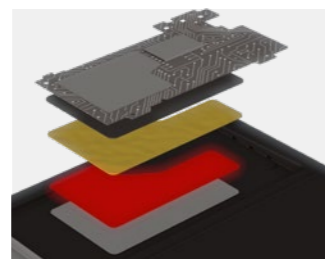
Typical applications



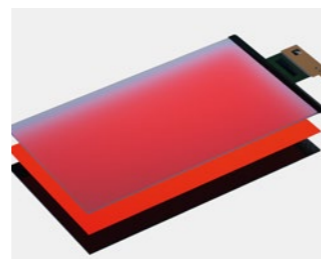
Thermal management



Antenna mounting



Vapor Chamber mounting



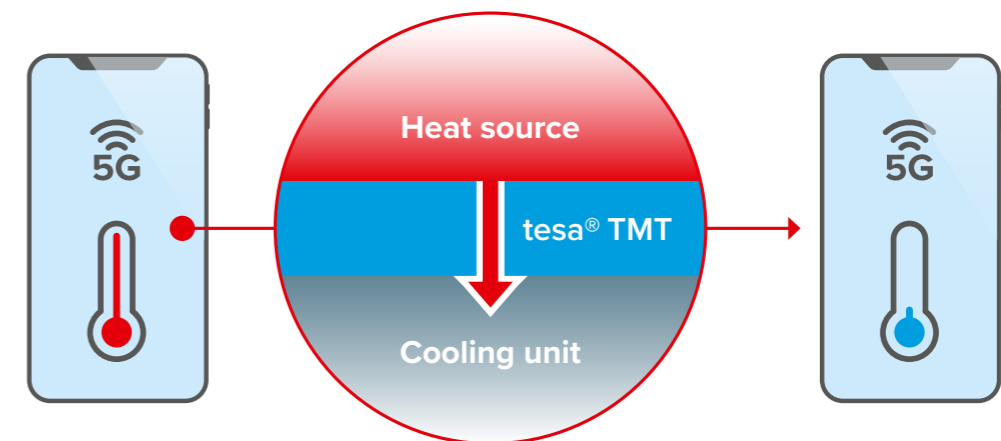
Thermal management for display

Assortment overview

| | tesa® 6074x | tesa® 60735 | |
|---------------------|--|--|-----|
| Design | | | |
| Color | White | Black | |
| Adhesive | Thermally conductive acrylic | Thermally conductive acrylic | |
| Special features | Excellent thermal transfer efficiency | Excellent appearance quality for display application | |
| Thickness | 10 µm | ○ 60742 | |
| | 30 µm | ○ 60743 | |
| | 50 µm | ○ 60744 | |
| | 100 µm | ○ 60745 | |
| Reference product | ○ 60744 | ● 60735 | |
| Product performance | Peel adhesion [N/cm; SUS initial/ultimate] | 5.0 | 4.0 |
| | Thermal conductivity [W/m x K] | 1.0 | 0.4 |
| | Wetting [%] | 84 | 82 |
| | Break-down voltage [kV] | 2.9 | 1.4 |

● Black ○ White

Cooling scenario

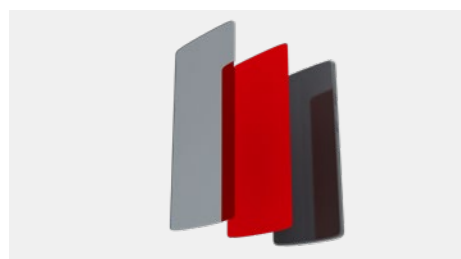


Display tapes

Optically clear adhesives with special features

Our comprehensive assortment is designed to provide a solution for every display application. All our materials are produced in a clean room and fulfill optically clear requirements, while also being environmentally stable and compatible with other display layers.

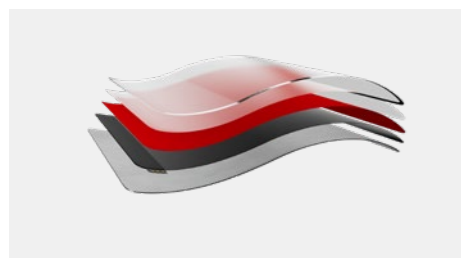
Typical applications



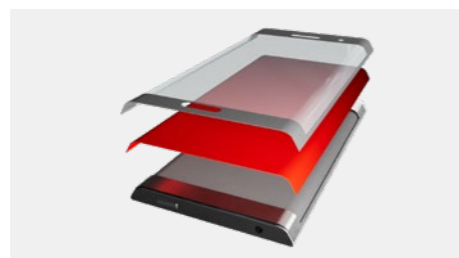
Cover lens lamination



Lamination in VR/AR devices



Touch panel lamination



3D cover lens lamination

New OCA solutions



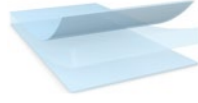
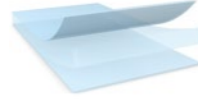
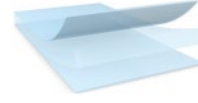
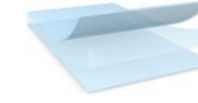
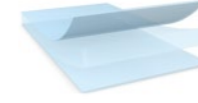
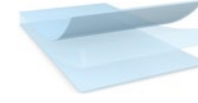
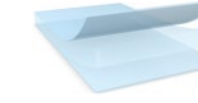
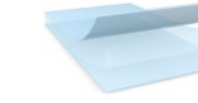
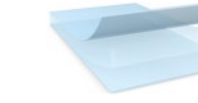
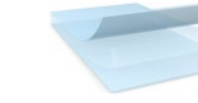
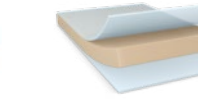
In addition to our active assortment, we are constantly developing new adhesive solutions for displays. Our latest innovations include tesa® OCA 693xx for thinner designs and tesa® 71xx with good mura resistance for automotive display. Besides, a range of OCAs that add UV-blocking properties for polarizer less designs are under development.



Flexible layers

Laminating flexible layers within a foldable or rollable display requires excellent peel adhesion and very good bending properties. For some special substrates like silver nanowire, an OCA tape with good compatibility is required. Contact us to learn more about available solutions.

Assortment overview

| | tesa® 693xx  | tesa® 699xx | tesa® 698xx | tesa® 696xx | tesa® 71xx  | tesa® 58xx | tesa® 694xx | tesa® 692xx | tesa® 6973xx | tesa® 6156x | tesa® 6153x | | |
|----------------------------------|---|---|---|---|--|---|---|---|---|---|---|------------------|------|
| Design |  |  |  |  |  |  |  |  |  |  |  | | |
| Color | Transparent | Transparent | Transparent | Transparent | Transparent | Transparent | Transparent | Transparent | Transparent | Transparent | Beige | | |
| Type | UV-curable | UV-curable | UV-curable | UV-curable | PSA | PSA | PSA | PSA | PSA | PSA | PSA | | |
| UV-curing dosage [mj/cm²] | 3,000 | 1,000 | 3,000 | 3,000 | - | - | - | - | - | - | - | | |
| Special features | High performance for thin design gaps | Curved design lamination | Outgassing resistant | Excellent gap filling | Mura resistance | Outgassing resistant | Lamination of films | UV-block | Foldable lamination | Low dK, low WVTR | Moisture blocking | | |
| Thickness* | 15 µm | | | | | | | | ○ 69730 | | | | |
| | 25 µm | ○ 69301 | ○ 69901 | | | | | | ○ 69731 | ○ 61562 | ● 61531 | | |
| | 50 µm | ○ 69302 | ○ 69902 | ○ 69802 | | | | | ○ 69732 | ○ 61563 | ● 61533 | | |
| | 75 µm | | | | | | | | ○ 69733 | ○ 61564 | | | |
| | 100 µm | ○ 69304 | ○ 69904 | ○ 69804 | ○ 69604 | | | ○ 69404 | ○ 69204 | | | | |
| | 125 µm | | | | ○ 69605 | | | ○ 69405 | | | | | |
| | 150 µm | | ○ 69906 | ○ 69806 | ○ 69606 | ○ 7106 | ○ 5806 | | ○ 69206 | | | | |
| | 175 µm | | | | ○ 69607 | | | | | | | | |
| | 200 µm | | ○ 69908 | ○ 69808 | ○ 69608 | ○ 7108 | ○ 5808 | | ○ 69208 | | | | |
| | 250 µm | | | | | ○ 7110 | ○ 5810 | | | | | | |
| | 300 µm | | | ○ 69812 | ○ 69612 | | ○ 5812 | | | | | | |
| | Reference product | ○ 69304 | ○ 69904 | ○ 69804 | ○ 69604 | ○ 7108 | ○ 5808 | ○ 69404 | ○ 69204 | ○ 69732 | ○ 61563** | ● 61533** | |
| Product performance | Glass | 11.8 | 12 | 10.2 | 11.1 | 8.6 | 9.1 | 6.9 | 6.9 | 2.4 | 5.0 | 6.5 | |
| | Peel adhesion [N/cm; ultimate] | PET | 4.6 | 10.6 | 7.6 | 7.9 | 7.8 | 5.7 | 4.8 | 4.8 | n.a. | 3.3 | 6.0 |
| | | PC | 14.1 | 12.6 | 9.8 | 10.0 | 9.4 | 8.5 | 7.0 | 7 | n.a. | 4.7 | 6.8 |
| | | Transmission [%] | >99 | >99 | >99 | >99 | >99 | >99 | >99 | >99 | >99 | >99 | n.a. |
| | Haze [%] | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | <0.5 | n.a. | |
| | Refractive index | 1.48 | 1.48 | 1.48 | 1.48 | 1.48 | 1.47 | 1.48 | 1.48 | 1.48 | 1.52 | n.a. | |
| | Gap filling [%] | 40 | 15 | 30 | 25 | 20 | 12 | 10 | 5 | 40 | <10 | <10 | |
| | Dielectric constant¹ | 5.7 | 4.58 | 4.7 | 4.5 | 5.3 | 6.7 | 4.9 | 4.9 | 5.6 | 2.56 | 2.92 | |
| | G' [kPa]² | 348 | 1,620 | 250 | 130 | 69 | 124 | 107 | 106 | 32 | 550 | Upon request | |
| | WVTR³ [g/m²·day] | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 0.9 | 0.4 ⁵ | |
| | Lag time⁴ [h] | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | n.a. | 25 | 10,000 | |

* Further thicknesses might be available upon request.

** Deviating thickness.

○ Transparent ● Beige

¹100 kHz

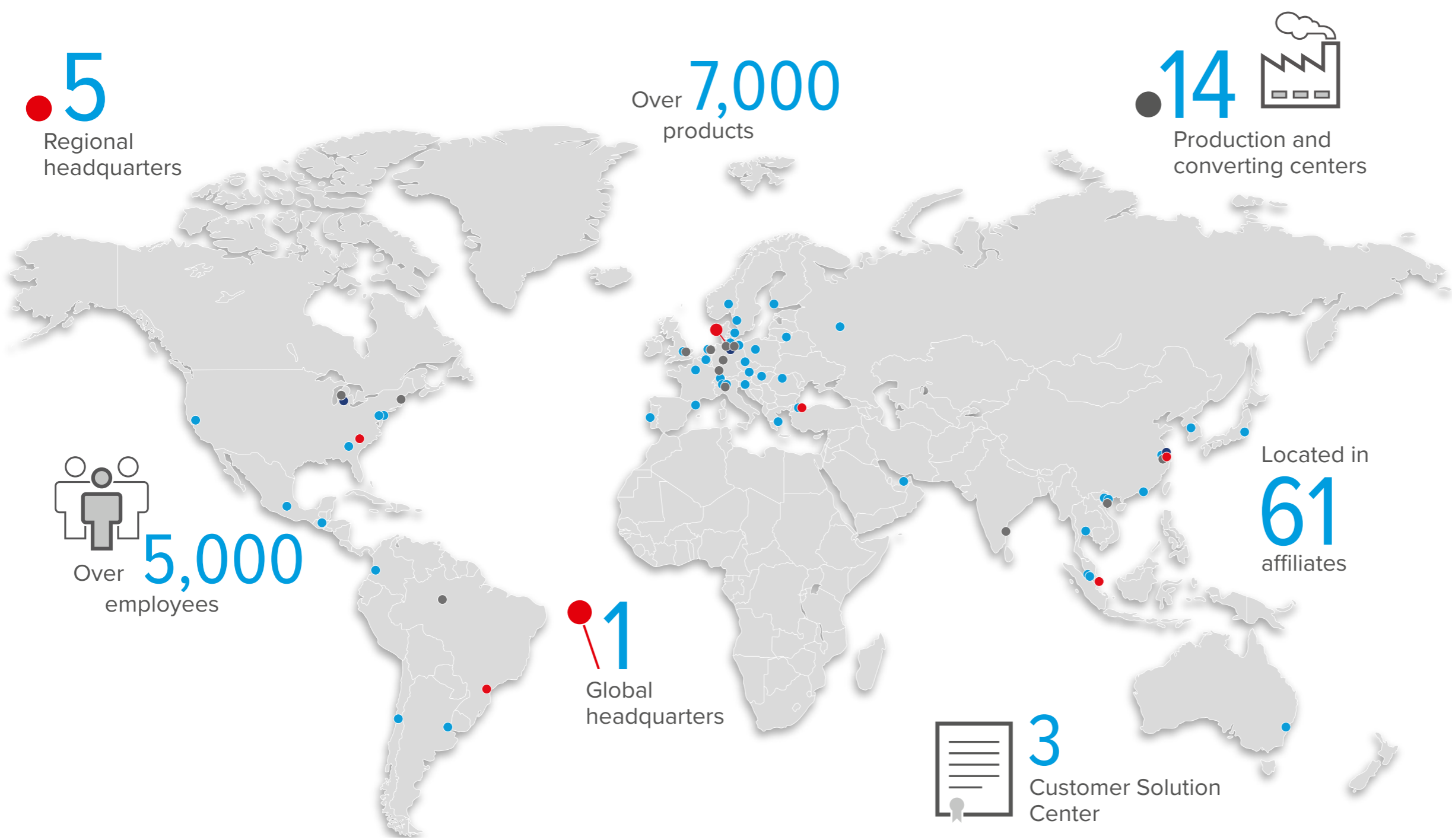
²25°C, 1 Hz

³38°C, 90% rel. humidity, 1 mm

⁴60°C, 90% rel. humidity, 6.5 mm gap

⁵ WVTR after all getter is used up

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