

The background of the entire page is a photograph showing several people in business attire (suits and sweaters) leaning over and pointing at a large, dark, rectangular solar panel. The scene is brightly lit, suggesting an outdoor or well-lit indoor environment. The solar panel has a grid-like pattern of lines across its surface.

Adhesive solutions for solar module production

Reliable self-adhesive tapes and efficient application
processes for all module types of today and tomorrow

Expertise by your side

The solar industry is very important to us. We understand the relevance of the global development of this market, both in existing areas and in areas that no one has thought of yet. We strongly believe in the power of adhesive tapes and we are determined to find a solution for every new requirement you present to us. Let's innovate together to take smart and renewable energy to a new level!



Always close

With more than 125 years full of innovation, we have developed into a global company. All over the world, we are exactly where our customers need us. We are represented in 100 countries and operate plants in Germany, Italy, China, the US, and soon, Vietnam.

Customized solutions

Our teams travel the world to support our customers with existing products and application solutions, and to keep up with new requirements and the latest innovations. In addition to having our dedicated local experts and highly qualified product and technology development staff, we also run "Customer Solution Centers". In these facilities, we conduct extensive tests for customer-specific projects to further develop existing product ranges and rethink processes for tomorrow's innovations.



Investing in the future

At tesa, we invest more than 5% of our turnover in the development of new products and technologies. Every year, 500 employees around the world develop 100 new solutions. And we take our responsibility seriously. We are committed to our sustainability agenda, and in our daily work, we continuously strive to reduce our environmental footprint.

Our broad assortment for the solar industry includes many tape categories:

- Bonding tapes
- Masking tapes
- Surface protection tapes
- Electrically conductive tapes
- Optical clear lamination tapes
- Barrier tapes
- Electrical insulation tapes

Application overview

‘Solar’ is not only a growing market but an ever-evolving one. Today wafer-based crystalline silicon (c-Si) modules, thin film modules, and ultrathin, flexible next generation modules all contribute to more sustainable energy generation. We have grouped our product offer in these generations of solar modules accordingly:



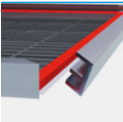
Wafer-based solar modules



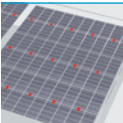
Thin film solar modules



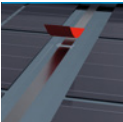
Next generation solar modules



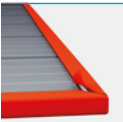
Frame bonding



Cell fixation



Hole covering



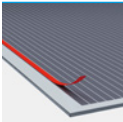
Temporary edge sealing



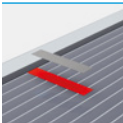
Junction box fixation



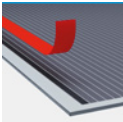
Cable fixation



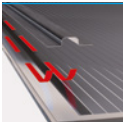
Charge collection



Lead foil insulation



Ribbon black out



Back rail fixation



Cable fixation



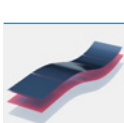
Hole covering



Junction box fixation



Module bonding



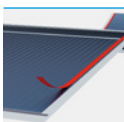
Barrier film lamination



Layer lamination



Temporary protection



Charge collection



Lead foil insulation



Junction box fixation



Transport protection



Do you love to innovate? We do too. Challenge us with your specific adhesive needs. We would love to contribute to your future developments with our profound adhesive expertise in solar markets and also as experts in electronics manufacturing and many other industries. Let's partner up for a more sustainable future.

Benefits of adhesive tapes:



Fast processes



Clean application



Reliable performance

To facilitate application processes, we offer our tapes in various forms and with fitting applicators if applicable. Please contact us with your specific requirements.

Example of tailored dispensing solutions for frame bonding:



Long-length tape spools

Our spooled tapes in long lengths and superior slitting quality enable an efficient framing process. They are designed to run in leading automated framing units and facilitate efficient mass production.



tesa® 6095 spool dispenser

To support the most efficient processes, our tesa® 6095 semi-automated dispenser unwinds and feeds long-length tape spools. This means fewer roll changes and less waste at a low investment cost and a solution that is very easy to integrate into existing production layouts.



tesa® edge taper LR

To efficiently apply tape from a pancake roll to the module edge, we recommend our 'tesa® edge taper LR', a precise, easy-to-use, well-proven handheld applicator with a liner removal function.

tesa® products prove their impressive quality day in, day out in demanding conditions and are regularly subjected to strict controls. All technical information and data above mentioned are provided to the best of our knowledge on the basis of our practical experience. They shall be considered as average values and are not appropriate for a specification. Therefore tesa SE can make no warranties, express or implied, including, but not limited to any implied warranty of merchantability or fitness for a particular purpose. The user is responsible for determining whether the tesa® product is fit for a particular purpose and suitable for the user's method of application. If you are in any doubt, our technical support staff will be glad to support you.

Overview: Products for key applications

Category	Application	Module type			Product	Description	Type	Backing	Adhesive	Color	Thickness [µm]
		Wafer-based	Thin film	Next gen							
Bonding	Flexible module bonding			●	tesa® 69402	Thin, optically clear adhesive bonding tape	d/s	None	Acrylic	Optical clear	50
				●	tesa® 4965	Transparent bonding tape with PET backing and very versatile adhesive	d/s	PET	Acrylic	Transpa- rent	205
				●	tesa® 62934	Conformable, gap filling PE foam tape with excellent bonding properties, UL certified	d/s	PE foam	Acrylic	Black/ white	800
				●	tesa® ACX ^{plus} 7074	Highly durable acrylic foam tape for demanding bonding applications, UL certified	d/s	Acrylic foam	Acrylic	Black	1000
				●	tesa® 4972	Thin, transparent bonding tape	d/s	PET	Acrylic	Transpa- rent	48
	Frame bonding	●			tesa® 62510	Conformable PE foam tape for frame bonding, UL and TÜV Rheinland certified	d/s	PE foam	Acrylic	Black/ white	1000
	Rail bon- ding and fixation	●	●		tesa® ACX ^{plus} 7078	Thick, highly durable acrylic foam tape for demanding bonding applications, UL certified	d/s	Acrylic foam	Acrylic	Black	2000
		●	●		tesa® ACX ^{plus} 7048	Firm gray acrylic foam tape in 2 mm thickness, for rail fixation	d/s	Acrylic foam	Acrylic	Gray/ white	2000
Electrical conductive	Charge collection		●	●	tesa® 60860	Single sided charge collection tape with tin plated copper backing and conductive adhesive	s/s	Copper	Conduc- tive	Silver	58
Fixation	Cell fixation	●			tesa® 4129	Thin, transparent single sided PET tape with acrylic adhesive	s/s	PET	Acrylic	Transpa- rent	50
		●			tesa® 7946	Thin, transparent single sided PET tape with acrylic adhesive, UL certified	s/s	PET	Acrylic	Transpa- rent	56
		●			tesa® 4134	Thin, transparent single sided PP tape with acrylic adhesive	s/s	BOPP	Acrylic	Transpa- rent	50
	Cable fixation	●	●	●	tesa® 64283	Blue, tear resistant single sided tape	s/s	BOPP	Rubber	Blue	77
		●	●	●	tesa® 4288	Black, tear resistant single sided tape	s/s	BOPP	Rubber	Black	114
Insulation	Lead foil insulation		●	●	tesa® 4972	Thin, transparent double sided insulation tape	d/s	PET	Acrylic	Transpa- rent	48
			●	●	tesa® 51982	Black-out double sided insulation tape with PET backing	d/s	PET	Acrylic	Black	100
Lamination	Layer lamination			●	tesa® 61562	Very thin optically clear lamination adhesive with moisture control function	d/s	none	Specialty	Optical clear	25
				●	tesa® 61563	Thin optically clear lamination adhesive with moisture control function	d/s	none	Specialty	Optical clear	50
				●	tesa® 69802	Thin optically clear lamination UV-curable adhesive for plastic substrates	d/s	none	Acrylic	Optical clear	50
	Barrier film lamination			●	tesa® 61531	Very thin opaque lamination adhesive with moisture blocking function	d/s	none	Specialty	Opaque	25
				●	tesa® 61533	Thin opaque lamination adhesive with moisture blocking function	d/s	none	Specialty	Opaque	50
Masking	Ribbon black out		●		tesa® 7250	Black single sided PET tape for masking and insulation	s/s	PET	Acrylic	Black	50
	Tempo- rary edge sealing and hole covering	●	●		tesa® 50650	Flexible masking tape with high temperature resistance and good removability	s/s	PET	Silicone	Blue trans- lucent	55
		●	●		tesa® 50600	Masking tape with high temperature resistance and good removability	s/s	PET	Silicone	Green translucent	80
Surface protection	Surface protection / protective interlayer			●	tesa® 4848 PV1	Thin, transparent and easy removal surface protection film	s/s	PE	Acrylic	Transpa- rent	48
				●	tesa® 4333 PV1	Easy removal, high-precision paper masking tape	s/s	Paper	Acrylic	Pink	80
				●	tesa® 50680	Transparent PET masking tape with low corrosion silicone adhesive	s/s	PET	Silicone	Transpa- rent	80



Please note that all listed products are example recommendations only. Please visit our websites for a full overview of applications and products and contact us with your application requirements to find a specifically tailored solution.



12/2022

Certifications

Our company is focused on international quality, environmental, and occupational safety standards.

Please find more information regarding our certifications at:
www.tesa.com/certifications

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