

Solutions for the Electronics Industry



tesa® Electronics Assortment 2013

INDUSTRY FOLDER



Solutions for the Electronics Industry

tesa is one of the leading global manufacturers of adhesive solutions for the electronics industry. Building on technologies and our dedicated people, we aim to help you improve processes and end products, wherever you are:

- Numerous sales offices, R&D and production facilities strategically positioned around the world.
- Extensive experience in the industry and profound knowledge of applications and the value chain.
- Assortment of tapes using different adhesives, liners and backings.
- Certified to international quality standards.
- Continuous investments in R&D and new production technology to meet your needs – both today and tomorrow.

This industry folder provides an overview of the tesa® electronics assortment. For more specific information on certain product types and applications, please contact us and request your personal copy of a tesa product or application folder.

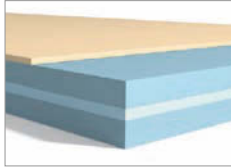

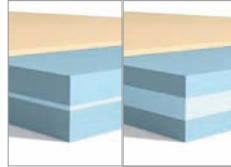
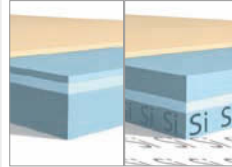






Brand and product protection for tesa® tapes – tesa Holospot® Security

- tesa SE prides itself in delivering high quality and performance products to its valued customers worldwide.
- The popularity and demand for the tesa products has also subjected tesa to the threat of counterfeits. These counterfeit products do not offer the quality and performance of a genuine tesa product and may have an impact on the quality of the end device, leading to premature product failure, and perhaps even endanger product safety compliance.
- To safeguard the tesa brand and its products – and to assist our customers in verifying their genuine tesa purchases, tesa is successively introducing a Product Authentication service that enables confirmation of the authenticity of tesa log rolls.



For additional information, please contact your local sales representatives.

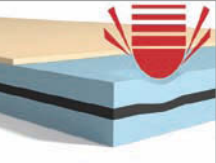
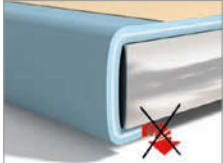
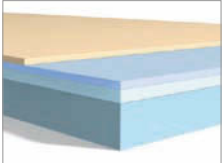
PET tapes

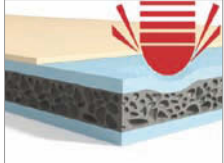
		Standard		Special		
		PET family	General mounting	Conformable & Easy handling	Differential & Silicone acrylic	Lens-mounting
Product group description		 <p>Solutions for standard mounting and lamination applications</p> <ul style="list-style-type: none"> Tackified acrylic adhesive PET backing in transparent and black 	 <p>Solutions for general mounting and lamination applications</p> <ul style="list-style-type: none"> Tackified acrylic adhesive PET backing in transparent and black 	 <p>Solutions for increased adhesion level at constant thickness / Solutions for improved handling of die-cuts</p> <ul style="list-style-type: none"> Tackified acrylic adhesive ≤ 50µm: Ultra thin and conformable PET backing ≥ 80µm: Thick and stiff PET backing 	 <p>Solutions for optimized bonding performance on different substrates</p> <ul style="list-style-type: none"> Different coating weight or different adhesive on either side of the tape PET backing 61532: Silicone adhesive 	 <p>Solutions for high push-out performance and high peel adhesion</p> <ul style="list-style-type: none"> Superior push-out resistance High peel adhesion PET backing in transparent and black
	Thickness cluster [µm]					
5				68556		
10				68557 / 68558 / 7308 (s/s)		
20				68559		
30	4983 ¹⁾ / 51983 ^{*1)}	68540 / 68740*	68550			
40						
50	4972 ¹⁾ / 51972 ^{*1)}	68542 / 68742*	68552	68582 / 61532		
60	68511					
70						
80	4980 ¹⁾ / 51980 ^{*1)}	68545 / 68745*	68575	68585 / 68785*		
90						
100	4982 ¹⁾ / 51982 ^{*1)}	68547 / 68747*			61360 / 61365*	
110						
120	4928 ¹⁾ / 51928 ^{*1)}	68548 / 68748*			61370 / 61375*	
130						
140	4942 / 51942*					
150			61320 / 61330*		61380 / 61385*	
160	4967 ¹⁾ / 51967 ^{*1)}					
170						
180						
190						
200	4965 ¹⁾ / 51965 ^{*1)}		4975 / 51975*		61390 / 61395* / 61335*	
220			53822*		61345*	
250			4926 / 51926*		61325*	
300						
400						
500						
700						
Application examples		 <ul style="list-style-type: none"> Foam lamination Mounting of components, e.g. speaker or receiver modules 	 <ul style="list-style-type: none"> General mounting and lamination 	 <ul style="list-style-type: none"> Conformable: Demanding mounting applications where an increased adhesion performance is necessary Easy handling: Narrow lens mounting die-cuts 	 <ul style="list-style-type: none"> Speaker mesh mounting Applications with requirements on removability 61532: Mounting on silicone or silicon-containing surfaces 	 <ul style="list-style-type: none"> Demanding lens mounting applications in mobile phones
	Application examples					



* Black version




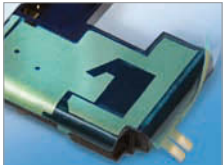

¹⁾ UL file MH18055 ³⁾ UL file E309290
²⁾ UL file MH25809 ⁴⁾ UL file E203787


TSP mounting	Anti-repulsion	Removable
		
Solutions for improved shock and push-out performance <ul style="list-style-type: none"> High push-out resistance High shock resistance PET backing in transparent and black 	Solutions for improved repulsion resistance <ul style="list-style-type: none"> Repulsion resistant adhesive PET backing in transparent and black 	Solutions for removable mounting <ul style="list-style-type: none"> Pure acrylic adhesive on removable side of the tape For d/s tapes tackified acrylic on permanent side PET backing in transparent and black



Foam tapes
PE foam

Solutions for improved shock resistance and gap filling <ul style="list-style-type: none"> Tackified acrylic adhesive Black PE foam backing 62645, 62646, 62945, 62946 and 62948 with PET reinforcement

HAF tapes	
Reactive	Thermoplastic
	
Solutions with extremely high bonding strength for long-term security <ul style="list-style-type: none"> Reactive adhesive 8451 and 8454 offer special shock resistance, even at low temperatures 58493 with PET backing Available in brown and black 	Solutions for temperature sensitive substrates <ul style="list-style-type: none"> Thermoplastic adhesive 8466, 8468 and 8469 with non-woven backing

	68530	68560 / 68760*		8471 ³⁾ / 58471*	
	68532 / 68732*	68562 / 68762*		58470*	8462
		50076 (s/s)		8472 ³⁾	
	68535 / 68735*	68565 / 68765*		58493*	
61760 / 61765*	68537 / 68737*	68567 / 68767* / 4720		8474 ³⁾ / 58474* / 8454	8444
61770 / 61775*				8475 ³⁾ / 58475*	
61780 / 61785*			62622*		8466
61790 / 61795*			62924* / 62624* / 62930*	8478 ³⁾ / 58478* / 8451	8467 / 8468
61725*			62625* / 62945* / 62645*		8469
			62946* / 62646* / 62626*		
			62948*		
			62932* ³⁾		

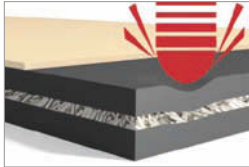
		
<ul style="list-style-type: none"> Demanding lens mounting and touch screen panel mounting 	<ul style="list-style-type: none"> Bonding on curved surfaces Mounting bent substrates Antenna mounting 	<ul style="list-style-type: none"> Removable mounting Sealing support for foam gaskets Temporary mounting prior to mechanical fixation


<ul style="list-style-type: none"> Touch panel / lens mounting in mobile phones Speaker module mounting Front panel mounting in notebooks Mounting on uneven surfaces

	
<ul style="list-style-type: none"> Constructive bonding inside electronic devices Bonding of decorative metal components 	<ul style="list-style-type: none"> Bonding of decorative or reinforcing metal components Bonding on large areas Bonding of metal logos to housing

Non-woven mounting tapes

Black



Solutions for improved shock resistance

- Black tackified acrylic adhesive
- Translucent non-woven backing

Translucent



Solutions for mounting and laminating

- Tackified acrylic adhesive
- Translucent non-woven backing

Light management tapes

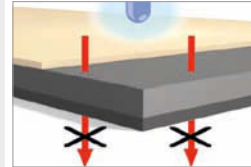
Optically clear



Solutions for optically clear mounting

- Optically clear pure acrylic adhesive
- Production in clean room
- PET double-liner system

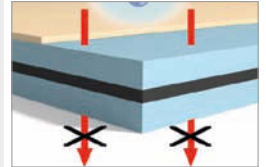
Light shading and blocking (s/s)



Solutions for light shading and blocking

- Acrylic adhesives (transparent or colored)
- PET backing (transparent or colored)

Light shading and blocking (d/s)



Solutions for light shading and blocking

- Acrylic adhesives (transparent or colored)
- PET backing (transparent or colored)

Product group description

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8851

8853 / 8857

8854 / 68644¹⁾

68645¹⁾

68646²⁾

4940²⁾

69401

69402

69403

69404

69405

69907

7510*

7415* / 7520*

7430* / 7530*

7550^{*4)} / 7250* / 50572^{*4)}

7160^{*4)}

50584^{*4)}

7100^{*4)}

7650*

7860*

7800*

Application examples



- Lens mounting in mobile phones
- Applications that require light shielding properties



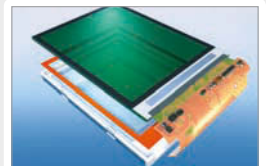
- Mylar lamination
- Mounting of rubber parts
- Logo mounting
- FPC SMT mounting application before reflow (885x series)



- Lamination of transparent films and glasses in displays and touch panels
- Touch panel mounting



- Fixing of cables or constructive parts in LED light sources or flat panel displays
- Light shielding in consumer electronics parts
- Electrical insulation



- Mounting of LCD panel and backlight unit
- Light blocking in displays and mobile phone applications

Electrically conductive tapes

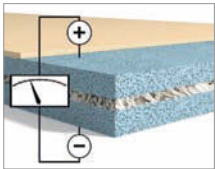
Anisotropically conductive (Z - direction)



Solutions for anisotropic conductive mounting

- Heat Activated Film with electrically conductive particles
- Excellent electrical conductivity in Z direction

Isotropically conductive (XYZ - direction)



Solutions for grounding

- Excellent electrical conductivity in XYZ direction
- 60272, 60274: Black color
- 60251: Removable tape
- 60246, 60248, 60249: Foam gasket tapes

Bond and detach

Stretchable adhesive

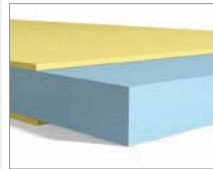


Solutions for temporary mounting

- Very high bonding strength
- Superior push out and shock resistance
- Easy removability by stretching the adhesive

Acoustic membranes

High performance speaker membranes

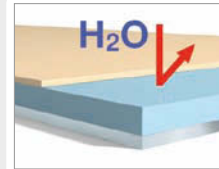


Multilayer membranes

- Good damping properties
- High durability
- 64170: 3-layer, 10µm PAR
- 64198: 3-layer, 8µm PEEK

Barrier tapes

Encapsulation (s/s and d/s)



Solutions for encapsulation of sensitive substrates

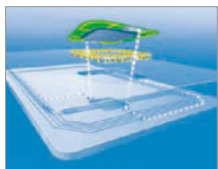
- Water vapor barrier adhesive
- Non-reactive with sensitive and active material
- 61560 s/s transparent and 61570 s/s non-transparent

Product group description

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500
700

Thickness cluster [µm]

Application examples



- Electrical connection - e.g. connection between antenna and chip in dual interface cards



- FPC grounding
- PCB grounding



- Temporary fixation of components
- Permanent mounting of components with the option to remove the parts for repairing or recycling



- Designed for high audio performance in electro-dynamic speakers



- Encapsulation of organic based layers
- Compatibility with sensitive materials – direct adhesion possible

Backings/Carriers

	PET	Non-woven	PE Foam
Features & Benefits	<ul style="list-style-type: none"> Excellent dimensional stability and tear resistance Precise die-cutting Available in various thicknesses from 2-50 µm Available in transparent, white, black and solid black color 	<ul style="list-style-type: none"> Highly conformable and shock-absorbing Good dimensional stability Translucent 	<ul style="list-style-type: none"> Excellent filling of larger gaps Very good sealing properties High shock and tension absorption Excellent leveraging of manufacturing tolerances PET film reinforcement optional Available in low thicknesses to meet electronics designs Black color

Adhesives

	Tackified Acrylic	Pure Acrylic	Heat Activated	Special
Features & Benefits	<ul style="list-style-type: none"> Well-balanced adhesive systems for general mounting and lamination applications Excellent aging resistance 	<ul style="list-style-type: none"> High temperature resistance Excellent shear resistance High UV resistance Very low VOC and corrosive ion content Available versions: Standard and optically clear 	<p>Heat activated adhesive systems for superior bonding strength</p> <p>Available versions:</p> <ul style="list-style-type: none"> Standard reactive adhesive: High humidity and aging resistance Thermoplastic adhesive (non-curing): Low activation temperature Special reactive adhesive: High shock resistance ACF adhesive: Anisotropic conductive 	<p>Available versions:</p> <ul style="list-style-type: none"> High shock and push-out resistant adhesives Repulsion resistant adhesive Water vapor barrier adhesive Silicone surface adhesive Removable adhesive Electrically conductive adhesive

Liners

	Glassine paper	PE-coated paper	MOPP	PET
Features & Benefits	<ul style="list-style-type: none"> Paper liners with a thickness of 70 µm Economical solution Available in brown with blue tesa logo and in white with red tesa logo 	<ul style="list-style-type: none"> PE-coated paper liners with a thickness of 120 - 130 µm Excellent humidity resistance Available in white with blue tesa logo 	<ul style="list-style-type: none"> Filmic (PP) liner with a thickness of 80 µm Dust-free convertability Available in red (translucent) 	<ul style="list-style-type: none"> Filmic (PET) liners Available in various thicknesses from 12-75 µm Double liner versions on request Available in transparent

Detailed Information

For additional information, please refer to the following brochures:

Application Folder:

- tesa® Solutions for Mobile Phones
- tesa® Solutions for Components
- tesa® Solutions for Digital Cameras
- tesa® Solutions for Flat Panel Displays
- tesa® Solutions for Touch Panels
- tesa® Solutions for Notebooks / Tablet PC
- tesa® Solutions for TVs

Product Folder:

- tesa® HAF Solutions for handheld devices in consumer electronics
- tesa® 50 µm double-sided tape assortment
- tesa® Double-sided Adhesive Tapes: Extended Solutions



tesa® products prove their impressive quality day in, day out in demanding conditions and are regularly subjected to strict controls. All information and recommendations are provided to the best of our knowledge on the basis of our practical experience. Nevertheless 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. Therefore, 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 staff will be glad to support you.

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