Tapes for bonding flexible detection sensors

Automotive Electronics Solutions

Many advanced driver-assistance system (ADAS) functionality and safety features require flexible detection sensors. Examples include seat belt reminders that incorporate sensors in the seats, and self-driving features that incorporate sensors in the steering wheel.

Avery Dennison offers double-coated and transfer tapes for bonding flexible detection sensors in various areas of the vehicle.

- · Thin bonding profile and instant bond
- · Adhesives compatible with flexible printed circuit inks
- · Low VOC options



Flexible Detection Sensor Bonding Tape Portfolio

| Application | Product | Adhesive Type | Construction | Thickness without liner (mils) | Thickness without liner (µm) | Core Series™ Portfolio* |
|--|-------------|-------------------------------------|---------------|--------------------------------------|------------------------------------|-------------------------------|
| Flexible Detection Sensor Bonding | FT 1149X | High Performance Low VOC Acrylic | Transfer Tape | 5.0 | 122 | • |
| | FT 1143 | Pure Acrylic | Transfer Tape | 3.1 | 76 | |
| | FBA 1118 GL | Low VOC Acrylic | Transfer Tape | 2.5 | 61 | • |
| | HPA™ 1905 | High Performance Acrylic | Transfer Tape | 4.9 | 120 | • |

^{*} The Core Series™ Portfolio is designed to make it easy for converters to quickly identify a product recommendation for their customers.



Automotive Electronics Solutions

Avery Dennison Automotive Electronics solutions address engineering challenges and meet OEM specifications related to vehicle electronics systems.

Electrification and electronics are key trends in automotive design

Drivers are demanding greater automotive safety, convenience and entertainment. These demands have prompted the emergence of vehicle electronic applications such as advanced driver-assistance systems (ADAS), driver information features, telematics services and infotainment hubs.

OEMs and tier suppliers are thus challenged to create electronics systems that are easy to assemble, lightweight and durable. These systems also need to perform flawlessly throughout a vehicle's life and across a wide range of environmental conditions.

Avery Dennison Automotive Electronics Tapes Portfolio

The Avery Dennison Automotive Electronics portfolio addresses some of the challenges related to assembly, durability and sensing accuracy for many applications.

Our solutions can help OEMs and tier suppliers:



Optimize Design and Assembly

Tapes can replace mechanical fastening methods with adhesive tapes offering a thinner profile, lighter weight, repositionability and instant bond.



Improve Durability

Tapes can seal and fill gaps for ingress protection, reduce vibrations and noise, and provide clearer vision.



Manage Vision and Sensing Challenges

Tapes can reduce glare, manage light and bond PTC heaters to reduce ice build-up on sensitive electronics.



Avery Dennison Automotive Electronics Tapes Product Portfolio

| Application | Product | Adhesive Type | Construction | Thickness without | Thickness without | Core Series™ |
|--|--------------|---|-------------------------------|----------------------|----------------------|-----------------|
| | | | | liner (mils) | liner (µm) | Portfolio* |
| Flexible PTC Heater Bonding and Gap Filling | HPA™ 1902 | High Performance Acrylic | Transfer Tape | 2.4 | 59 | • |
| | FT 1123 | General Purpose Acrylic | Transfer Tape | 3.3 | 81 | • |
| | FBA 1118 GL | Low VOC Acrylic | Transfer Tape | 2.5 | 61 | • |
| | FM 2465 WPET | High Performance Acrylic | Double Coated PE Foam | 37.0 | 903 | |
| | FM 2454 | High Shear Acrylic | Double Coated PE Foam | 35.2 | 859 | • |
| | AFB™ 22080B | Acrylic Foam Bond | Double Coated Acrylic Foam | 31.5 | 769 | |
| | FM 2465 WPET | High Performance Acrylic | Double Coated PE Foam | 37.0 | 903 | |
| Automotive | FM 2454 | High Shear Acrylic | Double Coated PE Foam | 35.2 | 859 | • |
| | FM 2116 | General Purpose Acrylic | Double Coated PE Foam | 68.0 | 1659 | • |
| Sensor | FM 2132 | General Purpose Acrylic | Double Coated PE Foam | 36.0 | 878 | • |
| Mounting and Sealing | AFB™ 22080B | Acrylic Foam Bond | Double Coated Acrylic Foam | 31.5 | 769 | |
| | AFB™ 22110B | Acrylic Foam Bond | Double Coated Acrylic Foam | 43.3 | 1057 | |
| Automotive | FT 8270 | High Performance Low VOC Acrylic | Double Coated Tissue | 7.0 | 171 | • |
| | FT 1149X | High Performance Low VOC Acrylic | Transfer Tape | 5.0 | 122 | • |
| Electronics Foam Gasket | FT 1126 | General Purpose Acrylic | Transfer Tape | 5.2 | 127 | • |
| Bonding | FT 8327 | General Purpose Rubber / High Shear Rubber | Double Coated PET | 4.6 | 112 | • |
| | FBA 8218 GL | Low VOC Acrylic | Double Coated Tissue | 5.8 | 142 | • |
| | FT 1118 GL | Low VOC Acrylic | Transfer Tape | 2.5 | 61 | • |
| Glare Reduction for ADAS Cameras | FT 0900X | High Performance Low VOC Acrylic | Single Coated Flock | 35.8 | 874 | • |
| | FT BNW 1079A | Modified Acrylic | Single Coated Felt | 43.4 | 1059 | |
| PTFE Vent | FT 9350 | Silicone | Double Coated PET | 6.0 | 146 | |
| Bonding | FT 9302 SF | Silicone / General Purpose Acrylic | Double Coated PET | 5.7 | 139 | • |
| Electronic Mirror and Display Mounting | FM 2454 | High Shear Acrylic | Double Coated PE Foam | 35.2 | 859 | • |
| | FM 2465 WPET | High Performance Acrylic | Double Coated PE Foam | 37.0 | 903 | |
| | FM 2405L | High Shear Acrylic | Double Coated PE Foam | 19.7 | 481 | |
| | FM 2454C | High Shear Acrylic | Double Coated PE Foam | 35.1 | 856 | |
| | AFB™ 22080B | Acrylic Foam Bond | Double Coated Acrylic Foam | 31.5 | 769 | |
| | AFB™ 22110B | Acrylic Foam Bond | Double Coated Acrylic Foam | 43.3 | 1057 | |
| Seat and Steering Wheel Heater Bonding | FT 1143 | Pure Acrylic | Transfer Tape | 3.1 | 76 | |
| | FT 2150 | Low VOC, Pure Acrylic | Transfer Tape | 2.3 | 56 | |
| | FBA 1118 GL | Low VOC Acrylic | Transfer Tape | 2.5 | 61 | • |
| | FT 666 | Rubber | Transfer Tape + Scrim | 9.5 | 232 | |
| Wire Harness Securement and Protection | FT 0900X | High Performance Low VOC Acrylic | Single Coated Flock | 35.8 | 874 | • |
| | FT BNW 1079A | Modified Acrylic | Single Coated Felt | 43.4 | 1059 | |
| | HPA™ 0316 | High Performance | Single Coated PET | 8.0 | 195 | |

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Go beyond bonding with Avery Dennison: Expansive product selection, plus customization and testing capabilities

The Avery Dennison Automotive Electronics portfolio offers multi-functional solutions that draw from our expansive portfolio of pressure-sensitive tapes and adhesives. We have a long track record in the automotive segment and are relied upon by OEMs and tier suppliers across the industry. Our products meet OEM specifications for a wide range of applications.

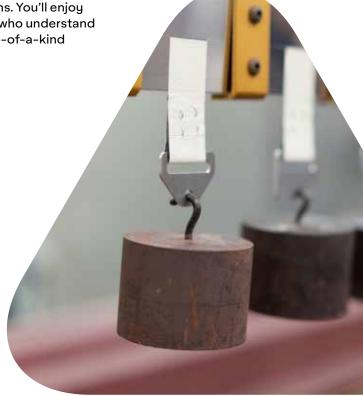
Beyond bonding means we also welcome the opportunity to collaborate with automotive OEMs and tier suppliers to develop custom tape solutions. You'll enjoy access to testing facilities and pressure-sensitive adhesive experts who understand the challenges engineers face. We can work together to produce one-of-a-kind products that give you the advantage you seek.

Collaboration

- · Global reach
- New product development for developing custom solutions for applications
- Business development and specification support for emerging applications
- · Application engineering and technical support

Testing

- · ISO 17025 certified laboratory
- Online tool offering easy access to our database of OEM certifications
- · Industry-standard testing and custom application testing
- Traditional pressure-sensitive adhesive bulk property testing (peel, tack and shear)
- Environmental conditioning (temperature, humidity, UV, chemical and more)
- Flame performance and dielectric strength testing at the tape and composite level





All Avery Dennison statements, technical information and recommendations are based on tests believed to be reliable but do not constitute a guarantee or warranty. All Avery Dennison products are sold with the understanding that the purchaser has independently determined the suitability of such products for its purposes. All Avery Dennison products are sold subject to Avery Dennison's general terms and conditions of sale found at tapes. averydennison.com/na/en/home/terms-and-conditions.html.

