# Bonding Microporous Venting Materials

## **Automotive Electronics Solutions**

The addition of more electronic components in modern vehicle design brings challenges of pressure differentials and ingress protection. Microporous vents alleviate these pressure differentials by allowing air to flow while keeping dust and water out.

Avery Dennison provides high-performance, temperatureresistant tapes for bonding microporous venting materials. Constructed with a silicone-based pressure-sensitive adhesive, these tapes are engineered for this application's processing and end-user requirements.

- Withstand temperatures of up to 500°F (260°C)
- Bond well to PTFE and other low-surface-energy LSE plastics
- Double-liner and thick-carrier constructions to allow for fast, easy dispensing
- Tapes can be custom engineered to meet specific requirements



### PTFE Vent Bonding Tape Product Portfolio

Application	Product	Adhesive Type	Construction	Thickness without liner (mils)	Thickness without liner (µm)	Core Series™ Portfolio*
PTFE Vent Bonding	FT 9302 SF	Silicone / General Purpose Acrylic	Double Coated PET	5.7	139	•

<sup>\*</sup> 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 heater films to reduce ice build-up on sensitive electronics.



# Avery Dennison Automotive Electronics Tapes Product Portfolio

Application	Product	Adhesive Type	Construction	Thickness without liner (mils)	Thickness without liner (µm)	Core Series™ Portfolio*
Flexible Heater Film 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	
Automotive	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	•
	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	
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	•
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	FT 0900X	High Performance Low VOC Acrylic	Single Coated Flock	35.8	874	•
	FT BNW 1079A	Modified Acrylic	Single Coated Felt	43.4	1059	
Protection	HPA™ 0316	High Performance	Single Coated PET	8.0	195	

<sup>\*</sup> The Core Series™ Portfolio is designed to make it easy for converters to quickly identify a product recommendation for their customers.

## 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





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