APPLICATION BRIEF: EV/BESS

THE CHALLENGES

Achieve Optimal Thermal Management Without Excessive Mass

Electrically Insulate Without Negatively Impacting Heat Flow

Increase Battery Life

Increase Pack Energy Density Within Smallest Form Factor Possible

Mitigate Thermal Runaway

Maintain Consistent Temperatures

Optimize Design & Assembly

Reduce Noise, Vibration & Harshness

THE SOLUTION(S)

PERFORMANCE MATERIALS FOR...

- Electrical Insulation
- Heat Spreading, Isolating, and Insulating
- Mechanical Compression
- Sealing and Gasketing
- Sound Absorption

SPECIALTY FORMULATED ADHESIVES TO...

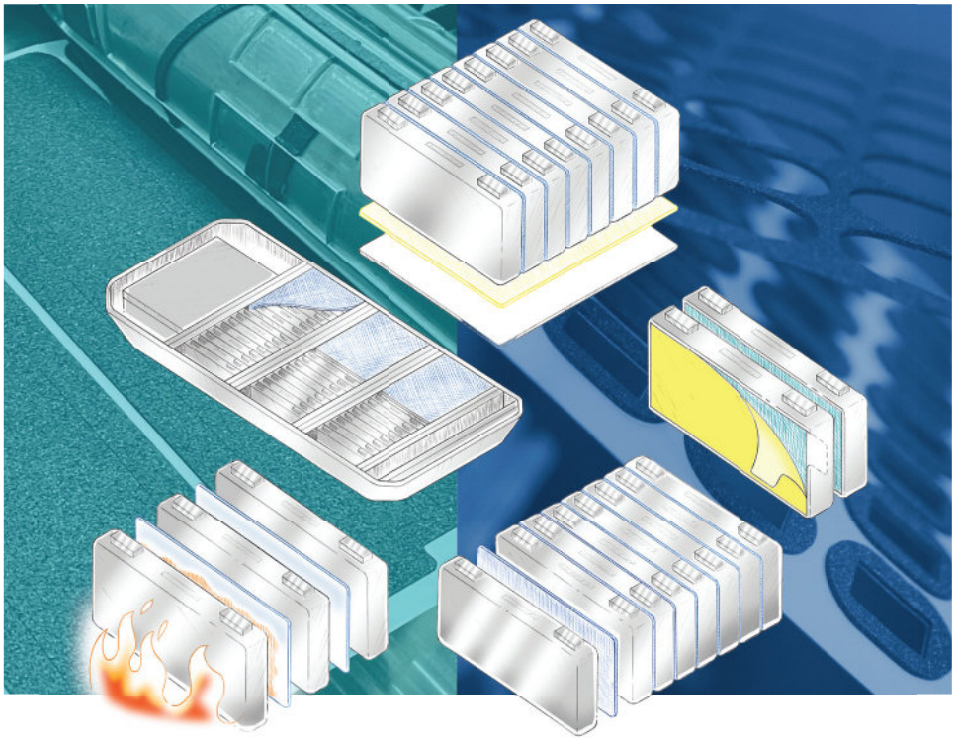
- Bond, Seal, Protect
- Add Dielectric Strength
- Reduce Flammability
- Dampen Vibrations

CUSTOM CONVERTING TO ACHIEVE MAXIMUM PART FUNCTIONALITY...

- With the least amount of weight
- In the smallest possible footprint
- In a way that optimizes production efficiency

JBC Technologies

www.jbc-tech.com



Converting Concepts Into Reality for Battery/BESS Applications

A state-of-the art die cutter and flexible materials converter, JBC Technologies, combines specialty materials, each with its own performance attributes, into single, lightweight, economical, easily installable components with multiple end-use contributions. Customers benefit from speed, precision, and consistency at extremely high volumes.

CAPABILITIES INCLUDE:

- Hot Roll and Cold Pressure Laminating to sandwich specialty materials together into custom stack-ups
- Rotary Die-Cutting for complex parts that require tight tolerances
- Narrow Web Platen Die-Cutting for simpler parts comprised of thicker, denser, and more rigid materials
- Wide Web Platen Die-Cutting for large single and multi-layer parts up to 72” in width
- Waterjet Cutting for materials that cannot be processed with traditional die-cutting
- Digital/Dieless Cutting for quick turn prototypes and short runs

VALUE-ADD PART DELIVERY SYSTEMS INCLUDE:

- Pull Tabs – to enable fast manual and automated removal of sacrificial liners
- Kiss Cutting – for efficient and accurate placement during in-line assembly
- Extended Release Liners – for easy liner removal

Contact Us Today!
440.327.4522
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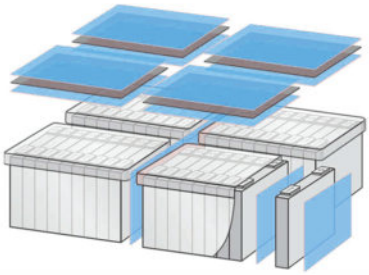
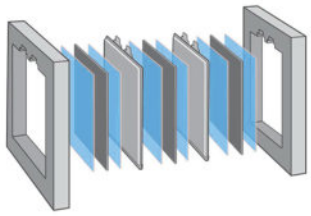
CERTIFIED ISO 9001:2015 COMPANY

Avery Dennison Performance Tapes
ADvantage Converter Network

Avery Dennison Go-To Adhesives for Critical EV/BESS Applications

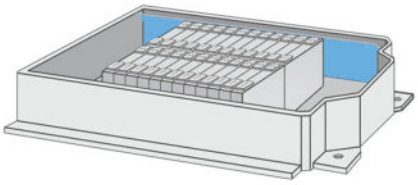
Thermal Barrier Encapsulation and Bonding

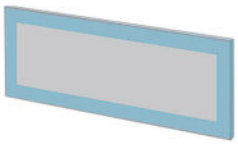


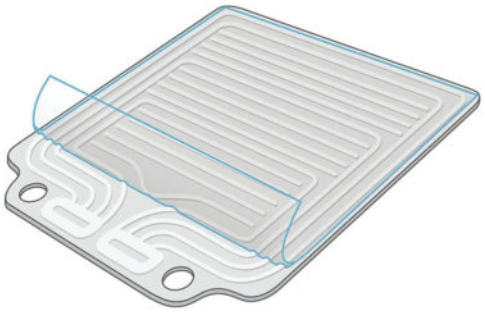


	Encapsulation			Bonding				
	No FR	Med FR	Best FR	FR Rated		General Bonding		
Benefits	Very Thin Cost Effective	FR Adhesive White PET	FR Facestock FR Adhesive	FR Thinnest	FR Heavier Bodied	Ceramic Papers EZ release	Higher Temps vs 8383EZ	Foam Tape Rigid Mica
Name	**FT0011**	**FT0333**	**FT0065**	**FT9850**	**FT8065**	**FT 8383EZ**	**FBA8960**	**FM2333**
Facestock(s)	PET	PET	Flame Tough™ PET	PET	Flame Tough™ PET	PET	PET	PE Foam
Adhesive	Emulsion Acrylic	Flame Tough™ Acrylic	Flame Tough™ Acrylic	Flame Tough™ Acrylic	Flame Tough™ Acrylic	Rubber	Acrylic	Acrylic
Total Thickness, mil (micron)	1.0 (25)	2.0 (50)	3.6 (92)	2.0 (50)	5.6 (142)	3.3 (84)	4.0 (102)	35.6 (904)
Dielectric Strength, kV	3.1	4.3	5.1	2	6.1	3.1	3.1	7.0
UL® 94 VTM		VTM-1	VTM-0	VTM-0	VTM-0			
Notes	Linerless, Clear	White	White		Zone Coatable	Zone Coatable	Zone Coatable	Gap Filling

EV Battery Applications for Boositng Dielectric Strength







Application	Pack Structure			Cooling Plates or Ribbons		
	Flat Surfaces		Tear Resistant	Flat Surfaces		Conformable
Benefits	Economical	FR	Tear Resistant FR	Cost Effective Thin Profile	Flame Retardant Thin Profile	Conformable Tear Resistant
Name	**FT0011**	**FT0065**	**FT0074**	**FT0012**	**FT0065**	**FT0031**
Facestock(s)	Flame Tough™ PET	Flame Tough™ PET	Conformable	Volt Tough™ PET	Flame Tough™ PET	Conformable
Adhesive	Emulsion Acrylic	Flame Tough™ Acrylic	Acrylic	Acrylic	Flame Tough™ Acrylic	Acrylic
Total Thickness, mil (micron)	1.0 (25)	3.6 (92)	5.0 (125)	2.0 (50)	3.6 (92)	4.1 (104)
Dielectric Strength, kV	3.2	5.1	6.1	5	5.1	11.2
Notes	Clear, Linerless	White	Clear	Clear, Linerless	White	Blue

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