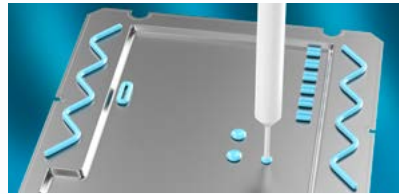


DISPENSABLE TWO PART GAP FILLERS

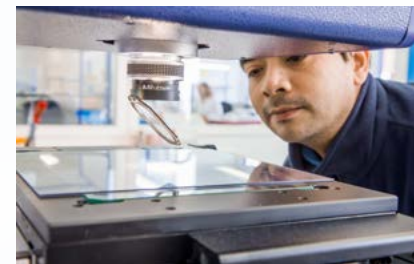
- Ultra-Conforming at almost ZERO Pressure
- Maximum Tolerance Compensation – from almost ZERO to some mm
- Excellent Thermal, Mechanical and Chemical Stability
- Minimized Siloxane Volatility for Silicone Sensitive Applications

OUR PRODUCTS:
 TDG-L-SI-2C-Y with 2.0 W/mK
 TDG-T-SI-2C with 3.0 W/mK
 TDG-U-SI-2C with 3.6 W/mK
 TDG-W-SI-2C with 4.5 W/mK
 TDG-Y-SI-2C with 6.0 W/mK



STRIVING FOR OPTIMIZED THERMAL SYSTEMS

Innovative heat pipe solutions for heat transfer and heat spreading to meet a wide range of application challenges in Electric and Hybrid Vehicles.

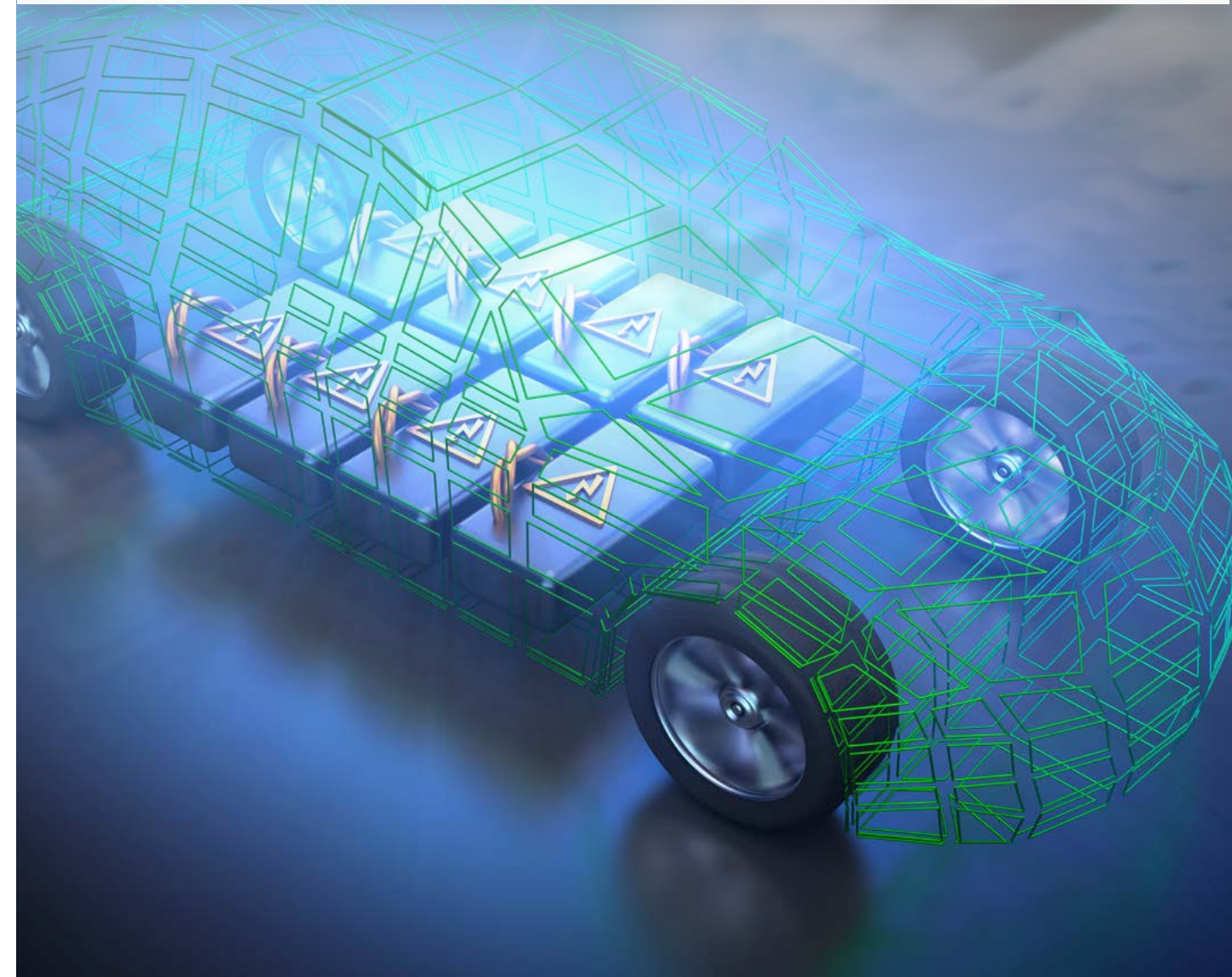


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ADVANCED THERMAL INTERFACE MATERIALS AND SOLUTIONS

FOR E-MOBILITY

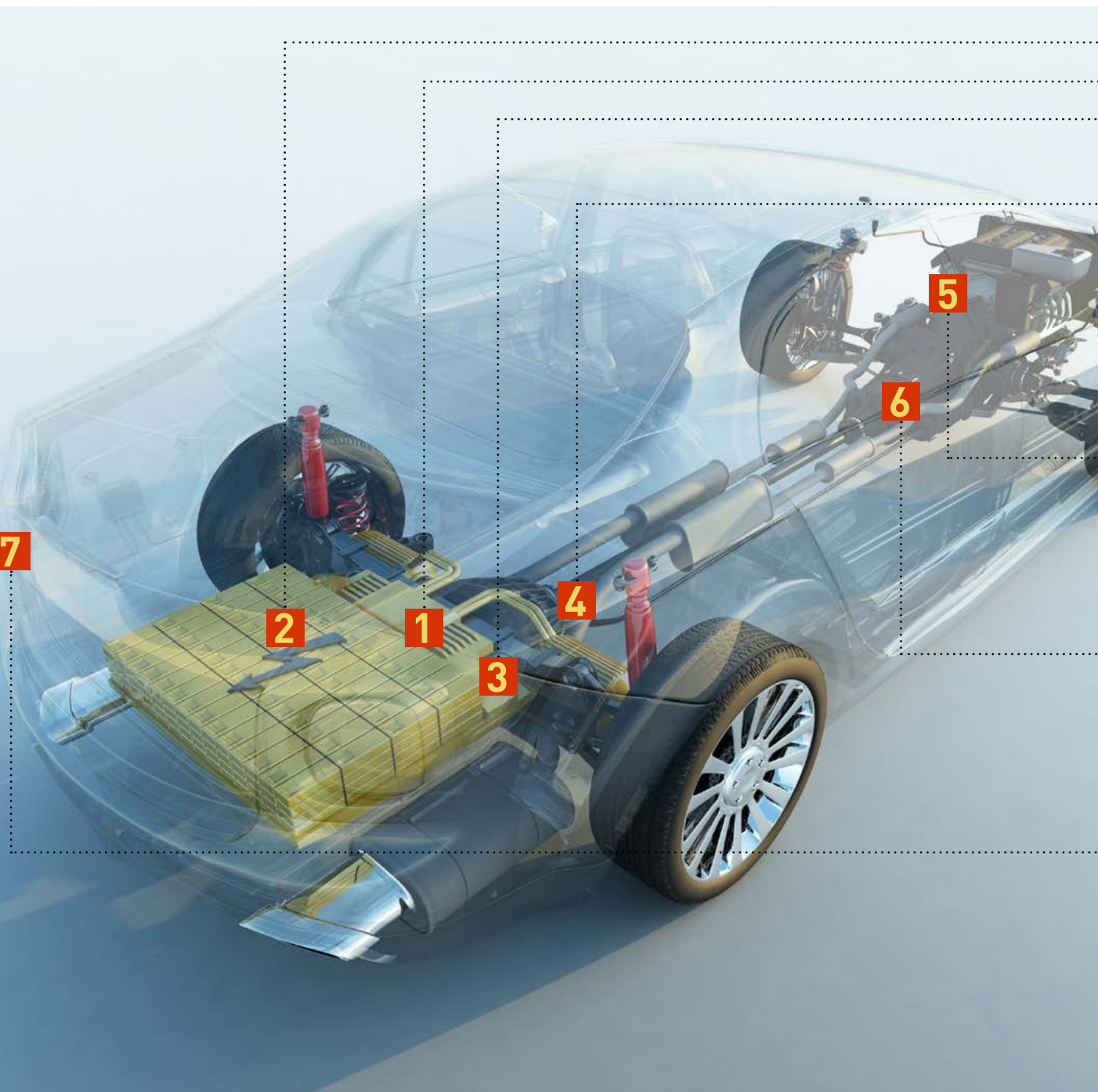


SOLUTIONS FOR E-MOBILITY

- Excellent Thermal Performance
- Silicone or silicone-free
- High Reliability under Harsh Conditions
- Lasting Mechanic, Thermal, Chemical Stability
- Stringent Cost-Efficiency
- Automated Assembly and Dispense
- Extending Life Time
- Reducing Power Consumption

EXTENDED RANGE OF THERMALLY CONDUCTIVE INTERFACE MATERIALS

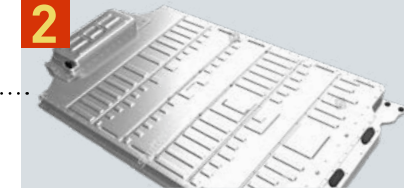
- Gap filler pads – silicone or silicone-free
- Dispensable 2 part gap fillers
- Silicone caps
- PSA tapes
- Foils and highly dielectric films
- 1 part silicone adhesives
- 2 part silicone or PU encapsulants
- Phase change films and compounds



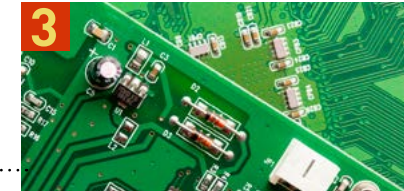
Battery Charger



Battery Packs



Battery Management Systems (BMS)



Power Converter / Inverter



Motor / Generator



PTC Heater



LED Systems



TYPE	PRODUCT	DATA						Where to be used in an Electric or Hybrid Vehicle						
		Color	Thermal Conductivity [W/mK]	Thermal Resistance @ 0.2 mm 150 PSI [*C-inch ² /W]	Dielectric Breakdown @ 0.2 mm [kV (AC)]	Glass Fibre Mesh Reinforcement	Optional 1-side Adhesive	1 Battery Charger	2 Battery Packs	3 Battery Management Systems (BMS)	4 Power Converter / Inverter	5 Motor / Generator	6 PTC Heater	7 LED Systems
Silicone Foils	TFO-X-SI	White	5.0	0.11	3.0	X	X	XX		XX		XX	XX	
	TFO-R-SI	White	3.5	0.16	3.0	X	X	XX		XX		XX	X	
	TFO-K-SI	Grey	2.5	0.24	2.0	X	X	XX		XX		XX	X	
	TFO-Q-SI	Pink	4.0	0.20	4.8	X	X	XX		XX		XX	X	
	TFO-O-SI	Grey	3.0	0.22	5.0	X	X	XX		XX		XX	X	
Highly Dielectric Silicone Foils	TFO-J-SI	Brown	2.0	0.31	5.0	X	X	XX		XX		XX	X	
	TFO-I-SI	Pink	1.5	0.68	10			X		X				
Silicone Caps		Color	Thermal Conductivity [W/mK]	Hardness [Shore 00]	Dielectric Strength [kV/mm]	Glass Fibre Laminate Reinforcement	Optional 1-side non tacky							
	Silicone Gap Filler Pads	TGF-WSS-SI	Grey	5.5	55	10		X	XX		XX			
		TGF-USS-SI	Grey / Grey	3.3	45	10			XX	X	X			
		TGF-TSS-SI	Purple	3.2	37	15			XX	X	X			
	Silicone-free Gap Filler Pads	TGF-RSS-SI	Light blue	3.0	43	>7	X		XX	X	X			
		TGF-LSS-SI	Light beige	2.5	34	>7	X		XX	X	X			X
		TGF-M-SI	Blue	2.5	50	10		X	X		XX			
		TGF-VP-SI	Grey	5.5	60	5		X	X	X	XX			
		TGF-JXS-SI-A1	Blue / Grey	2.0	20	10			X	XX	X			
		TGF-AXS-SI-GF	White / Pink	1.1	5	>8	X		X	XX	X			
		TGF-R-NS	White	3.0	75	7.8			X		XX			X
	Dispensable 2 Part Silicone Gap Fillers	TGF-W-NS	White	6.0	70	7.8			XX		XX	X		
TGF-NSS-NS		Brown	2.5	47	1.9			X	X	X	X		X	
Dispensable 2 Part Silicone Gap Fillers		Color	Thermal Conductivity [W/mK]	Hardness [Shore 00]	Dielectric Strength [kV/mm]	Density [g/cm ³]	Viscosity Brookfield mixed @ 10 rpm [Pas]							
	TDG-Y-SI-2C	Dark Blue / White	6.0	60	10	3.40	235	XX	X	XX	XX			
	TDG-U-SI-2C	Blue / White	3.6	38	10	2.85	260	X	X	X				
	TDG-T-SI-2C-LW	Blue / White	3.0	55	10	2.20	300	XX	XX	XX				
TDG-L-SI-2C-Y	Yellow / White	2.0	52	10	1.90	260	XX	XX	XX		XX			
PSA Tapes		Color	Thermal Conductivity [W/mK]	Thermal Resistance [*C-inch ² /W]	Dielectric Breakdown [kV (AC)]	Peel Off @ Al [N/cm]	Thickness [mm]							
	TAT-J-PE	White	0.7	0.50	8.9	6.1	0.20						XX	
1 Part Silicone Adhesives		Color	Thermal Conductivity [W/mK]	Hardness [Shore A]	Curing	Density [g/cm ³]	Viscosity Brookfield [Pas]							
	TAD-P-SI-1C	Grey	2.30	67	Condensational	2.11	350	X		X	X		XX	
	TAD-O-SI-1C	Grey	2.10	56	Additional	2.18	140	XX		XX	XX			
TAD-G-SI-1C	Grey	1.38	67	Additional	2.06	43	XX		XX	XX				
2 Part Silicone Encapsulant		Color	Thermal Conductivity [W/mK]	Hardness	Curing	Density [g/cm ³]	Viscosity Brookfield mixed [Pas]							
	TCR-H-SI-2C	Light grey / Orange	1.2	40 [Shore A]	Additional	2.2	1.95					X		
	TCR-D-SI-2C	Beige / Black	0.68	32 [Shore A]	Additional	1.60	4.5					XX		
2 Part PU Encapsulant	TCR-J-PU-2C-LV-AR	Blue / Brown	1.5	45 [Shore D]	Additional	2.3	4	X	XX	X	X	X		
	TCR-N-PU-2C-LV-AR	Natural / Brown	2.6	45 [Shore D]	Additional	2.3	25	XX	XX	XX	X			
Phase Change Film		Color	Thermal Conductivity [W/mK]	Thermal Resistance @ 150 PSI [*C-inch ² /W]	Phase Change Temperature	Carrier	Thickness [mm]							
	TPC-W-PC	Grey	3.5	0.01	45	Aluminum	0.1, 0.2, 0.3	X		X	XX		X	
TPC-T-AL-CB	Black		0.01	50			0.076, 0.102	XX		X	XX		XX	
Heat Pipe Assembly		Function	Thermal Conductivity [W/mK]	Heat Pipe Material	Temperature Range	Filler	Assembly							
		Heat Transfer Heat Spreading	> 5000 W/mK	Copper	0 to 200 °C	Deionidised water	Aluminum / Copper	XX		XX	XX	X	XX	