MATRIX

Thermally Conductive Gap Filler Pads

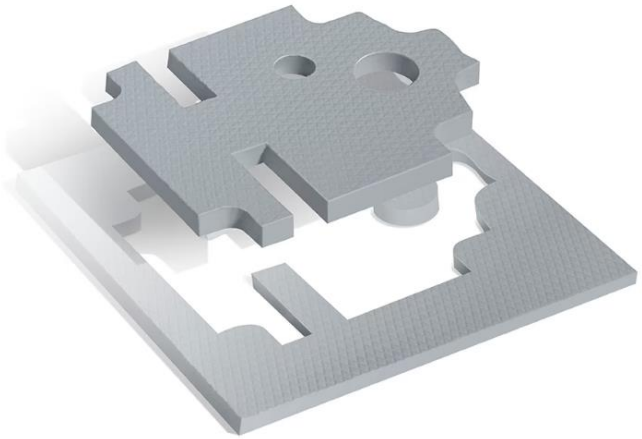
THERM-A-GAP 569 thermally conductive gap filler pads provide a very low hardness (10 Shore 00) solution with 1.5 W/m-K of thermal conductivity. THERM-A-GAP 569 series gap-filler sheets and pads offer excellent thermal properties and the highest conformability at low clamping forces. THERM-A-GAP 569 is the economical combination of thermal performance and conformability.

PRODUCT FEATURES:

- Ultra-low deflection force requirements
- High thermal conductivity
- High tack surface reduces contact resistance
- UL 94 V-0 flammability rated
- RoHS compliant

IDEAL APPLICATIONS:

- Telecommunications equipment
- Consumer electronics
- Automotive electronics (ECUs)
- LEDs and lighting
- Power conversion
- Desktop computers, laptops, and servers
- Handheld devices
- Memory modules
- Vibration dampening



Authorized Canadian Partner

Parker | Chomerics

AVAILABLE SIZES:

- 9x9’ or 18x18’
- Matrix can precision cut to custom part sizes

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Head Office: 905-477-4442
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www.matrixtechnology.ca

MATRIX

MATRIX PRECISION CONVERTING

Your Application. Our Expertise.

Matrix specializes in precision cutting and converting of engineered materials to meet the exact specifications required by manufacturers. Our state-of-the-art equipment and expertise ensure precise customization, providing manufacturers with streamlined solutions to enhance their product quality and performance.

THERM-A-GAP™ Gap Filler Pads

	Typical Properties†	HCS10	569	570	579	580	Test Method
Physical	Color	Orange / Gray Carrier	Gray	Blue	Pink	Yellow	Visual
	Binder	Silicone	Silicone	Silicone	Silicone	Silicone	--
	Carrier Options G = Woven glass - no pressure sensitive adhesive (PSA) A = Aluminum foil - with acrylic PSA PN = PEN film KT = Thermally enhanced polyimide Unsupported (no carrier) = no letter suffix	 HCS10G HCS10A 	 G569 A569 569PN 	 G570 A570 	 G579 A579 579PN 579KT 579	 G580 A580 580	--
	Standard Thicknesses*, in (mm) Unsupported (no carrier): 0.120-0.200 (3.0-5.0)	0.010 - 0.200 (0.25 - 5.0)	0.010 - 0.200 (0.25 - 5.0)	0.020 - 0.200 (0.5 - 5.0)	0.010 - 0.200 (0.25 - 5.0)	0.020 - 0.200 (0.5 - 5.0)	ASTM D374
	Specific Gravity	2.0	2.2	2.2	2.9	2.9	ASTM D792
	Hardness, Shore 00	4	10	25	30	45	ASTM D2240
	Percent Deflection @ Various Pressures** (0.125 in thick sample) @ 5 psi (34 kPa) @ 10 psi (69 kPa) @ 25 psi (172 kPa) @ 50 psi (345 kPa)	 % Deflected 26 36 59 73	 % Deflected 20 30 50 65	 % Deflected 10 15 25 35	 % Deflected 22 33 55 68	 % Deflected 7 10 20 30	ASTM C165 MOD (0.125 in "G" Type, 0.50 in dia probe, 0.025 in/min rate)
	Operating Temperature Range, °F (°C)	-67 to 392 (-55 to 200)	-67 to 392 (-55 to 200)	-67 to 392 (-55 to 200)	-67 to 392 (-55 to 200)	-67 to 392 (-55 to 200)	--
Thermal	Thermal Conductivity, W/m-K	1	1.5	1.5	3	3	ASTM D5470
	Thermal Impedance, °C-in²/W (°C-cm²/W) @ 10 psi, @ 0.04 in (1 mm) thick, "G" version only	1.5 (9.7)	1.4 (9.1)	1.4 (9.1)	0.7 (4.5)	0.7 (4.5)	ASTM D5470
	Heat Capacity, J/g-K	1	1	1	1	1	ASTM E1269
	Coefficient of Thermal Expansion, ppm/K	N/A	250	250	150	150	Chomerics
Electrical	Dielectric Strength, Vac/mil (kVac/mm)	200 (8)	200 (8)	200 (8)	200 (8)	200 (8)	ASTM D149
	Volume Resistivity, ohm-cm	10^{14}	10^{14}	10^{14}	10^{14}	10^{14}	ASTM D257
	Dielectric Constant @ 1,000 kHz	5.3	6.5	6.5	8.0	8.0	ASTM D150
	Dissipation Factor @ 1,000 kHz	0.013	0.013	0.013	0.010	0.010	Chomerics Test
Regulatory	Flammability Rating (See UL File E140244 for details)	V-0	V-0	V-0	V-0	V-0	UL 94
	RoHS Compliant	Yes	Yes	Yes	Yes	Yes	Chomerics Certification
	Outgassing, % TML (% CVCM)	0.44 (0.13)	0.42 (0.08)	0.35 (0.09)	0.19 (0.06)	0.18 (0.05)	ASTM E595
	Shelf Life, months from date of shipment	36	36	36	36	36	Chomerics
	Shelf Life, months from date of shipment - "A" aluminum foil carrier version only	18	18	18	18	18	Chomerics
	Storage Conditions, °F (°C) @ 50% Relative Humidity	50 to 90 (10 to 32)	50 to 90 (10 to 32)	50 to 90 (10 to 32)	50 to 90 (10 to 32)	50 to 90 (10 to 32)	Chomerics

† Typical properties: these are not to be construed as specifications.
* Thickness tolerance, in (mm) ±10% nominal thickness @ 0.1 in (2.5 mm) or less; ± 0.01 in (0.25 mm) @ nominal thickness greater than 0.1 in (2.5 mm). Custom thicknesses may be available upon request.
** The typical deflection range is approximately 5-40%.
*** Laminated polyester film provides low abrasion on one side as well as improved dielectric isolation.

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