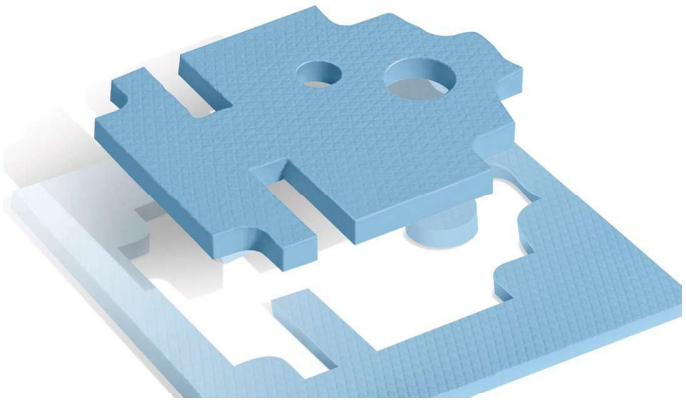
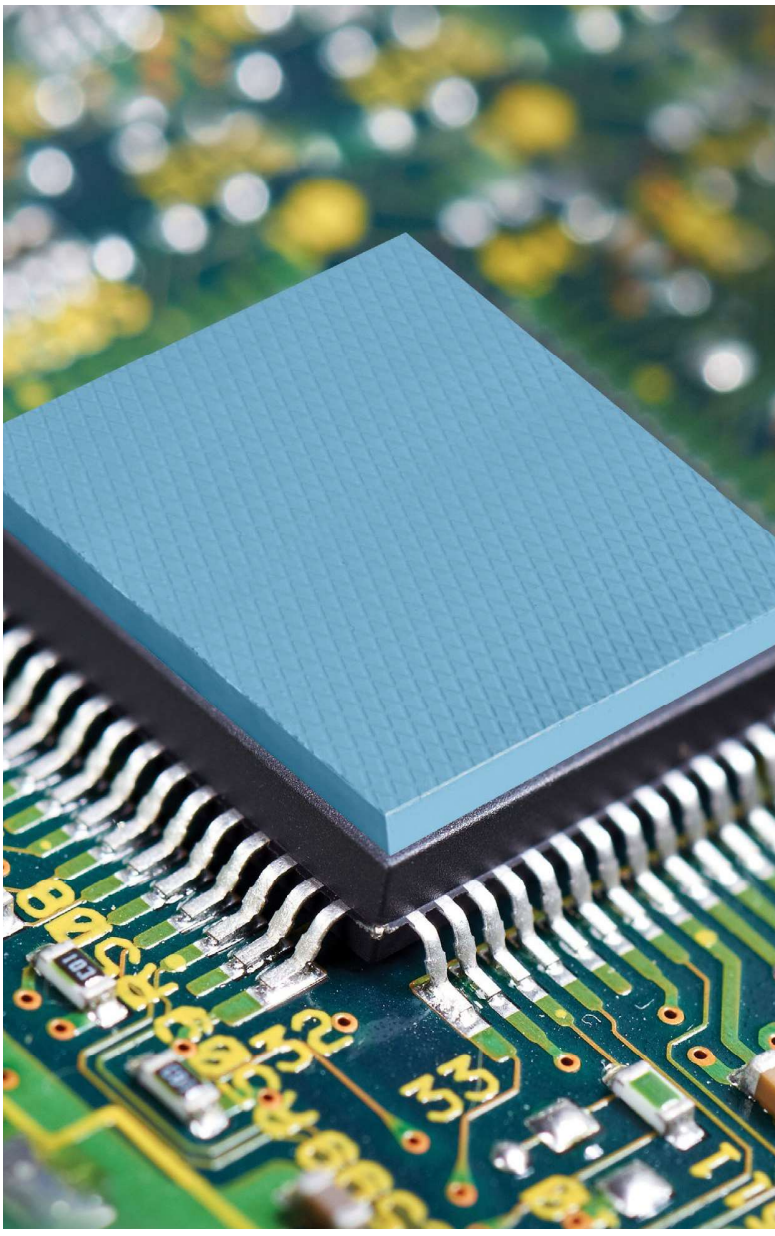
THERM-A-GAP™ PAD 30

3.2 W/m-K Thermally Conductive
Very Low Compression Force Gap Filler Pad

Parker Chomerics THERM-A-GAP™ PAD 30 is a thermally conductive, electrically isolating gap filler pad with a thermal conductivity of 3.2 W/m-K. Designed to provide effective heat transfer between electronic devices, heat sinks, or other cooling features, THERM-A-GAP PAD 30 offers the ideal combination of heat transfer, low outgassing, and low compressing forces. With a Shore 00 hardness measurement of 30, it is designed to maintain conformability in gaps that contain uneven mating surfaces, air gaps, or where rough surface texture is a concern.



THERM-A-GAP PAD 30 was developed to be a universal solution across applications and industries requiring a moderate level of thermal performance in electronic device designs. It is a cost-effective solution and optimized for flexibility of design with several material carrier options available and ease of customization to unique shapes and sizes.



Product Features

- 3.2 W/m-K thermal conductivity
- Very low compression force
- Very good thermal conductivity
- High tack surface reduces contact resistance
- "A" version offers high strength acrylic PSA for permanent attachment
- UL recognized V-0 flammability
- RoHS compliant
- Vibration dampening

Typical Applications

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

Parker Chomerics

ELECTRONIC SERVICE GmbH
Hohe Straße 3, 61231 Bad Nauheim
T +49 (0)6032 9636-0
info@electronic-service.de
www.electronic-service.de

THERM-A-GAP PAD 30 PRODUCT INFORMATION

	Typical Properties†	PAD 30	Test Method
Physical	Color	Blue	Visual
	Carrier Options: G = Woven glass - no pressure sensitive adhesive (PSA) A = Aluminum foil - with PSA PN = PEN film KT = Thermally enhanced polyimide No letter suffix = None (unsupported)	PAD30G PAD30A PAD30PN PAD30KT PAD30	--
	Standard Thicknesses*, in. (mm)	0.020 – 0.200 (0.51 – 5.08)	ASTM D374
	Specific Gravity	2.9	ASTM D792
	Hardness, Shore 00	30	ASTM D2240
	Percent Deflection @ Various Pressures** (0.120 in thick sample) @ 5 psi (34 kPa) @ 10 psi (69 kPa) @ 25 psi (172 kPa) @ 50 psi (345 kPa)	% Deflected 17% 26% 38% 49%	ASTM C165 MOD (0.120 in with no Carrier, 0.50 in dia. probe, 0.025 in/min rate)
Thermal	Operating Temperature Range, °F (°C)	-67 to 392 (-55 to 200)	Chomerics
	Thermal Conductivity, W/m-K	3.2	ASTM D5470
	Thermal Impedance, °C-in^2/W (°C-cm^2/W) @ 10 psi, @ 0.04 in. (1mm) thick, "G" version	0.4 (2.6)	ASTM D5470
	Heat Capacity, J/g-K	1	ASTM E1269
	Coefficient of Thermal Expansion, ppm/K	150	ASTM E831
Electrical	Dielectric Strength, V_{AC}/mil (kV_{AC}/mm)	150 (5.9)	ASTM D149
	Volume Resistivity, ohm-cm	10^{13}	ASTM D257
	Dielectric Constant @ 1,000 kHz and at 0.039 (1mm) thick	7.7	ASTM D150
	Dissipation Factor @ 1,000 kHz and at 0.039 (1mm) thick	0.001	CHO-TM-TP13
Regulatory	Flammability Rating (See UL File E140244 for Details)	V-0	UL 94
	RoHS Compliant	Yes	Chomerics Certification
	Outgassing, % TML (% CVCM)	0.13 (0.03)	ASTM E595
	Shelf Life, months from date of shipment (PAD 30A)	36 (18)	Chomerics
	Storage Conditions, °F (°C) @ 50% Relative Humidity	50 to 90 (10 to 32)	Chomerics

† Typical properties: these are not to be construed as specifications.
* Thickness tolerance, inches (mm) is ±10% of the nominal part thickness for parts 0.100" (2.5mm) thick or less; those parts greater than 0.100" (2.5mm) thick are held to ±0.010" (±0.25mm).
** The typical deflection range is approximately 5-40%.

Parker Chomerics

ELECTRONIC SERVICE GmbH
Hohe Straße 3, 61231 Bad Nauheim
T +49 (0)6032 9636-0
info@electronic-service.de
www.electronic-service.de

THERM-A-GAP PAD 30 ORDERING INFORMATION

9” x 9” Sheets - Pressure Sensitive Adhesive (PSA) only with Aluminum Foil Carrier

“G”, “PN”, “KT”, “A” carrier and unsupported

Part Number: 6W — XX — 0909 — ZZZZZZZ

1 = No Pressure Sensitive Adhesive
2 = Pressure Sensitive Adhesive (PSA), Available Only with Aluminum Foil Carrier (A Letter Designation)

Thickness (in)
Available in 0.010” increments from (0.020” - 0.200”)
(0.51 mm - 5.08 mm)

0.020 = 02†	0.110 = 11
0.030 = 03	0.120 = 12
0.040 = 04††	0.130 = 13
0.050 = 05	0.140 = 14
0.060 = 06	0.150 = 15
0.070 = 07	0.160 = 16
0.080 = 08	0.170 = 17
0.090 = 09	0.180 = 18
0.100 = 10	0.200 = 20

Sheet Size
0909 = 9” x 9” sheet
(228.6 mm x 228.6 mm)

Material/Carrier
No Carrier (Unsupported)
PAD30

Aluminum Foil w/ PSA (A)
PAD30A

Woven Glass (G)
PAD30G

Kapton (KT)
PAD30KT

PEN Film (PN)
PAD30PN

* See typical properties table for thicknesses
† Minimum thickness for PAD30G, PAD30PN, PAD30KT and PAD30A
†† Minimum PAD30 (unsupported) thickness

Ordering Information: Custom Configurations

Sheet thickness tolerance is ± 10% of the nominal thickness OR ±0.010”, whichever is smaller. Please contact Parker Chomerics for a pre-assigned part number, for custom widths, lengths and part sizes; etc. Available options include custom die-cut parts on sheets, or as individual parts.

Handling Information

These products are defined by Parker Chomerics as “articles” according to the following generally recognized regulatory definition for articles:

An article is a manufactured item “formed to a specific shape or design during manufacturing,” which has “end use functions” dependent upon its size and shape during end use and which has generally “no change of chemical composition during its end use.”

In addition:

- There is no known or anticipated exposure to hazardous materials/substances during routine and anticipated use of the product.
- The product’s shape, surface and design is more relevant than its chemical composition.

These materials are not deemed by Parker Chomerics to require an MSDS. For further questions, please contact Parker Chomerics at 781-935-4850.

We’re Here to Help

Scan QR code or visit parker.com/chomerics to:

- Request a Free Sample
- Talk to an Expert
- Get a Quote
- Find Where to Buy

Parker Hannifin Corporation
Chomerics Division
77 Dragon Court
Woburn, MA 01801
Phone 781 935 4850
Fax 781 933 4318
chomailbox@parker.com
parker.com/chomerics

CHODS1003 July 2024

©2024 Parker Hannifin Corporation

Parker Chomerics

ELECTRONIC SERVICE GmbH
Hohe Straße 3, 61231 Bad Nauheim
T +49 (0)6032 9636-0
info@electronic-service.de
www.electronic-service.de