

## **Thermal Material HCS10**

#### Parker Chomerics THERM-A-GAP™ HCS10

- THERM-A-GAP™ HCS10 is an economical thermal interface solution
- Ultra-low hardness (4 Shore 00) with or without PSA
- 1.0 W/m-K of thermal conductivity
- Alternative to Bergquist VO Ultrasoft Materials
- Excellent thermal properties & high conformability at low clamping forces
- Available in thicknesses from 0.010 0.350in (0.25 8.89mm)



THERM-A-GAP™ HCS10, 569, 570 and 580 Thermally Conductive Pads						
	Typical Properties <sup>1</sup>	HCS10	569	570	579	580
Physical	Color	Orange/ Grey Carrier	Grey	Blue	Pink	Yellow
	Supported (standard):     G - Woven glass carrier - no PSA     A - Aluminum foil carrier - with PSA  Supported (custom):     PN - PEN film carrier     KT - Thermally enhanced polyimide carrier  Unsupported (no carrier):     579 and 580 only - no letter notation needed	HCS10A or HCS10G	A569. G569 or 569PN	A570 or G570	A579, G579, 579PN, 579KT, or 579	A580, G580, or 580
	Standard Thicknesses <sup>2</sup> , in (mm) Unsupported (no carrier): 0.12-0.200 (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)
	Specific Gravity	2.0	2.2	2.2	2.9	2.9
	Hardness, Shore 00	4	10	25	30	75
	Percent Deflection @ Various Pressures³ (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 10 15 25 35	% Deflected 7 10 20 30
	Operating Temperature Range. °F (°C)	-67 to 392 (-55 to 200)	-67 to 392 (-55 to 200)			
	Thermal Conductivity, W/m-K @ 25 psi	1	1.5	1.5	3	3

<sup>†</sup> Typical properties: these are not to be construed as specifications.



<sup>\*</sup> 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.

<sup>\*\*</sup> The typical deflection range is approximately 5-40%.

<sup>4 \*\*\*</sup> Laminated polyester film provides low abrasion on one side as well as improved dielectric isolation.

### **EMI Shielding**





**EMI Shielding Paints** 



Conductive Adhesives



**Conductive Sealants** 



Metal Foil Tapes



EMI Shielding Air Vents



Conductive Plastic



Conductive Heat Shrink Tubing



Microwave Absorber Materials



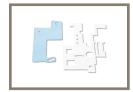
Conductive Links



Conductive Grease



Adhesion Enhancing Primers



**EMI Shielding** Laminates



**EMI Shielding** Gaskets



**EMI** Attenuating Cable Chokes



Wraps

# **EMI Shielding Cable**

### **Thermal Interface**





Thermally Conductive Gap Filler Pads



Thermally Conductive Greases



Thermally Conductive Phase Change Materials



Thermally Conductive Dielectric Pads



Thermally Conductive Attachment Tapes



Thermally Conductive Gels



Thermally Conductive Cure-in-Place Potting



Thermally Conductive Heat Spreaders