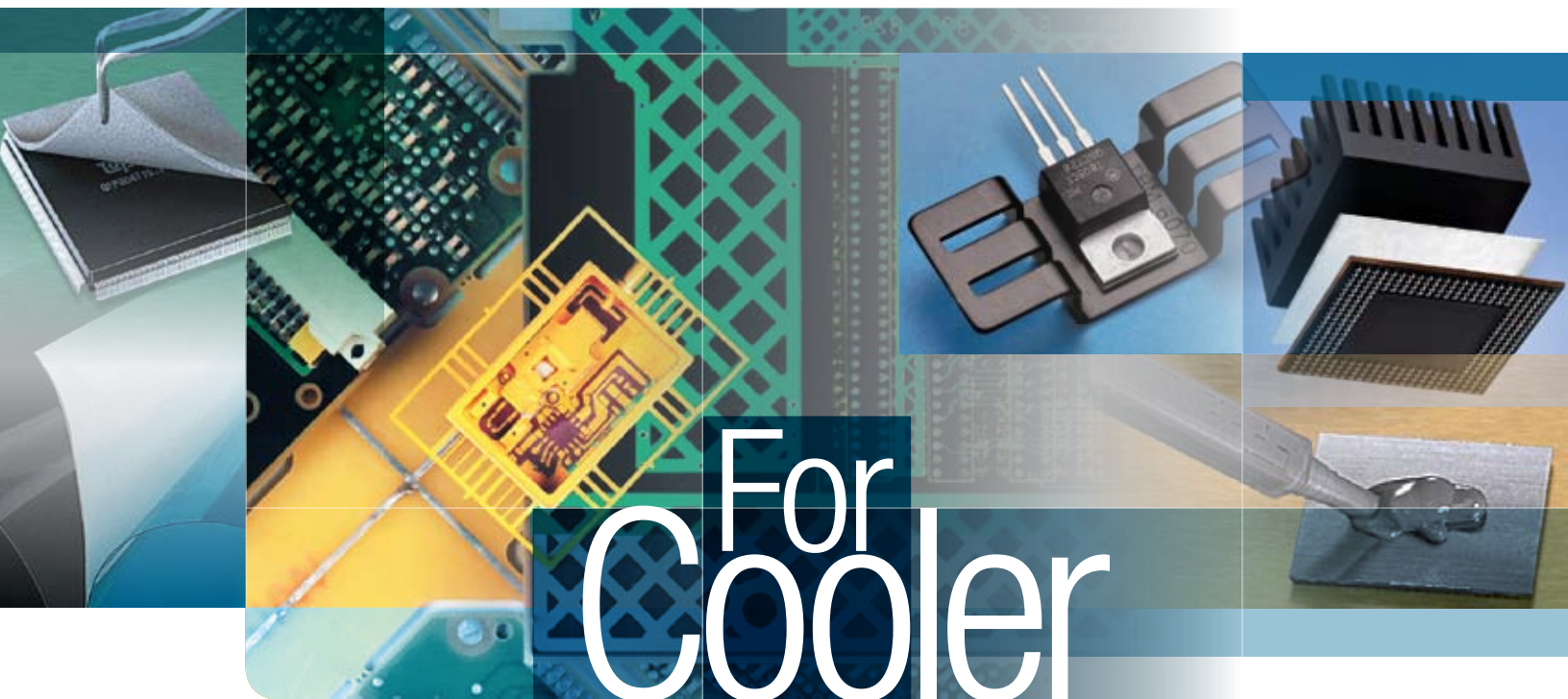


3M™ Thermally Conductive Silicone Interface Pads 5516/5516S, 5519/5519S, 5591S, 5592/5592S, 5595/5595S

For applications requiring gap filling and superior thermal performance



For Cooler More Reliable Devices

Used to transfer heat from hot surfaces or devices to cooler surface region of assembled devices.

- Excellent conformability, gap filling property that provides excellent heat flow
- Excellent environmental durability
- Range of thermal performance to 150°C

Designed with a variety of thermal conductivities and softness grades.

Available with PET permanent film on one side

- Non-tacky surface eases rework and assembly
- Improves dielectric strength



Selection Guide

Product	Description				Adhesion/Shore 00 Softness	Thermal Performance		Dielectric Properties		UL Flammability Rating	Potential Operating Temperature Range*** (°C)
	Base Material Type	Product Thickness mil (mm)	Filler Type	Liner Type	Adhesion Characterization /// Shore 00 Testing based on TM 6mm Thickness	Conductivity (W/m-K 3M ASTM D5470 TM)	Impedance**** (°C-in²/W (°C-cm²/W))	Dielectric Strength KV/mm (Film version tested)	Volume Resistivity (ohm/cm)		
5516 5516S* Soft Pad	Filled Silicone Polymer	20(0.5) 40(1.0) 60(1.5) 80(2.0)	Ceramic	PET	No added adhesive layer. Pad is tacky and conformable /// Shore 00=73	3.1	0.31 (2.0) 0.53 (3.4) 0.76 (4.9) 0.98 (6.3)	3.1	6.9 x 10 ¹⁴	3M V1 or VO TM**	Short Term (Hours-Days): 150°C Long Term (Weeks-Months): 100-125°C
Notes: *1) 3M Pad 5516S is Thermal Pad 5516 with a polymeric permanent film on one side to be used as a non-tacky surface for ease of reworking an assembly. Thermal Conductivity and Thermal Impedance are slightly changed with addition of the film, while Dielectric strength is improved. 2) Optional thicknesses >2.0mm are available. Call 3M for details.											
5519 5519S* Soft Pad	Filled Silicone Polymer	20 (0.5) 40 (1.0) 60 (1.5) 80 (2.0)	Ceramic	PET	No added adhesive layer. Pad is tacky and conformable /// Shore 00=80	4.1	0.29 (1.9) 0.48 (3.1) 0.65 (4.2) 0.82 (5.3)	3.1	6.9 x 10 ¹⁴	3M V1/VO or VO TM**	Short Term (Hours-Days): 150°C Long Term (Weeks-Months): 100-125°C
Notes: *1) 3M Pad 5519S is Thermal Pad 5519 with a polymeric permanent film on one side to be used as a non-tacky surface for ease of reworking an assembly. Thermal Conductivity and Thermal Impedance are slightly changed with addition of the film, while Dielectric strength is improved. 2) Optional thicknesses >2.0mm are available. Call 3M for details.											
5591S* Ultra Soft Pad	Filled Silicone Polymer	20 (0.5) 40 (1.0) 60 (1.5) 80 (2.0)	Ceramic	PET	No Added adhesive layer. Pad is tacky and conformable /// Shore 00=10-15	1.0	1.14 (7.3) 1.92 (12.4) 2.71 (17.5) 3.49 (22.5)	7.9	2.0 X 10 ¹²	3M V1 or VO TM**	Short Term (Hours-Days): 150°C Long Term (Weeks-Months): 100-125°C
Notes: *1) 3M Pad 5591S has a 12µm PET permanent film on one side to be used as a non-tacky surface for ease of reworking an assembly. 2) 3M Pad 5591S is available in the 0.5mm -2.0mm thickness. 3) Optional thicknesses > 2.0mm are available. Call 3M for details.											
5592 5592S* Soft Pad	Filled Silicone Polymer	20 (0.5) 40 (1.0) 60 (1.5) 80 (2.0)	Ceramic	PET	No added adhesive layer. Pad is tacky and conformable /// Shore 00=40-50	1.1	0.64 (4.1) 1.15 (7.4) 1.66 (10.7) 2.43 (15.7)	14.7	3.0 X 10 ¹²	3M V1 or VO TM**	Short Term (Hours-Days): 150°C Long Term (Weeks-Months): 100-125°C
Notes: *1) 3M Pad 5592S is Thermal Pad 5592 with a 12µm PET permanent film on one side to be used as a non-tacky surface for ease of reworking an assembly. Thermal Conductivity and Thermal Impedance are slightly changed with addition of the PET film, while Dielectric strength is improved. 2) 3M Pad 5592S is available in the 0.5mm -2.0mm thickness. 3M Pad 5592 1.0-2.0mm thickness. 3) Optional thicknesses > 2.0mm are available. Call 3M for details.											
5595 5595S* Soft Pad	Filled Silicone Polymer	20 (0.5) 40 (1.0) 60 (1.5) 80 (2.0)	Ceramic	PET	No added adhesive layer. Pad is tacky and conformable /// Shore 00= 50-60	1.6	0.70 (4.5) 1.21 (7.8) 1.71 (11.0) 2.22 (14.3)	15.7	5.0 X 10 ¹²	3M V1 or VO TM**	Short Term (Hours-Days): 150°C Long Term (Weeks-Months): 100-125°C
Notes: *1) 3M Pad 5595S is Thermal Pad 5595 with a 12µm PET permanent film on one side to be used as a non-tacky surface for ease of reworking an assembly. Thermal Conductivity and Thermal Impedance are slightly changed with addition of the PET film, while Dielectric strength is improved. 2) 3M Pad 5595S is available in the 0.5mm -2.0mm thickness. 3M Pad 5595 1.0-2.0mm thickness. 3) Optional thicknesses > 2.0mm are available. Call 3M for details.											
** 3M V1 or VO TM Notes: 1) Test results based on 3M UL Test Method. 2) The 3M V1 TM testing applies to the 0.5mm thick products in the "S" version.											
**** Thermal impedance is measured with the test sample under a nominal 10psi pressure to reflect a typical end use application.											

Important Notice: Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use.

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