

**Overview:**

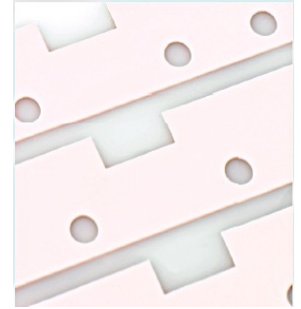
Kerafol® is a manufacturer and market leader for premium ceramics powder that is used to manufacture all its ceramics product which **THERMAL INTERFACE** is one of the product.

KERATHERM® thermally conductive silicone film series are designed to be highly conductive that provide well-balanced thermal, electrical, dielectric behaviour providing a thin bond-line with very good inherent tack characteristics.

Applications that required better mechanical strength can be achieved through fiberglass reinforcement and adhesive coating is an optional availability.

**Applications:**

- Aircraft/Aerospace • Automotive Electronics • Consumer Electronics • Industrial Controls & Automation
- Medical Devices • Power Supplies • Semiconductor

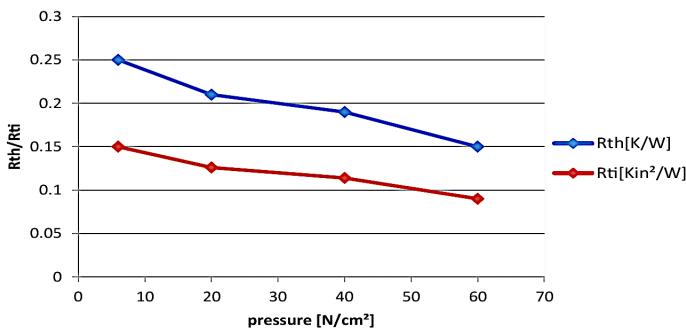


Thermal And Dielectric Comparison - Kerafol* Vs. Bergquist SilPad 2000 / TSP3500					
Properties	Unit	86/50	86/60	SilPad 2000 / TSP 3500	Test Method
Colour	-	Pink	Pink	White	Visual
Reinforcement	-	None	None	Fiberglass	Visual
<b>Thermal Properties</b>					
Thermal resistance $R_{th}$	K/W	0.16*	0.14*	-	Kerafol*
Thermal impedance $R_{ti}$	$^{\circ}Cmm^2/W$	64*	56*	-	Kerafol*
	$Kin^2/W$	0.09*	0.079*	-	Kerafol*
Thermal conductivity $\lambda$	W/m-K	3.5	4.5	3.5	ASTM D5470
<b>Electrical Properties</b>					
Breakdown voltage $U_{d,ac}$	kV	1.5	5.0	4.0	ASTM D149
Dielectric breakdown $E_{d,ac}$	kV/mm	7	20	-	ASTM D149
Volume resistivity	$\Omega m$	$1.3 \times 10^{14}$	$>600 \times 10^9$	$1 \times 10^{11}$	ASTM D257-3
Dielectric loss factor $\tan \sigma$	1	$6.7 \times 10^{-2}$	0.0	-	ASTM D150
Dielectric constant $\epsilon_r$	1	2.3	1.47	4.0	ASTM D150
<b>Mechanical Properties</b>					
Measured thickness (+/-10%)	mm	0.225	0.250	0.250	ASTM D734
Hardness	Shore A	70 - 80	60 - 75	90	ASTM D2240
Tensile strength	N/mm <sup>2</sup>	1.3	> 0.5	-	ASTM D412
<b>Physical Properties</b>					
Operating temperature	$^{\circ}C$	-60 to +250	-60 to +200	-60 to +200	Kerafol
Density	g/cm <sup>3</sup>	1.97	1.38	-	Kerafol
Flame rating	UL 94	*VO	*VO	VO	*U.L. E140693
Total Mass Loss (TML)	Ma.-%	-	<0.32	-	ASTM E 595
Thickness available	mm	0.125, 0.225, 0.300	0.150, 0.200, 0.250, 0.300	0.250, 0.381	Kerafol
Size	mm	*500 x 1000	*500 x 1000	304 x 304	-

\* Kerafol material is supply in roll form of 500mm wide to a maximum length of 100 metres per roll to allow maximum yield.

\* Data provided are nominal values that should not be used to write specifications. Users are advised to test and decide the suitability of the product to fit their applications.

Compression 86/50



Compression 86/60

