KERAFOL®
Keramische Folien GmbH & Co. KG

Made In Germany

SOFTTHERM®

Thermally Conductive Silicone Thick Pad

Put It On – Go To Sleep

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.
Kerafol® SOFTTHERM® series of thermal interface thick pad are designed to meet the thermal interface industry requiring greater conformability, higher performance and easier application. SOFTTHERM provides an effective thermal interface between heat sinks and electronic devices where uneven topography, air gaps and rough surface textures are present.

Applications:

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

Thermal And Dielectric Comparison - Kerafol®* Vs. Bergquist Gap Pad VO, VO Soft, VO Ultra Soft							
Properties	Unit	86/125	86/128	VO aka TCP 800VO	VO Soft aka TCP 1000VOS	VO Ultra Soft aka TGP 1000VOUS	Test Method
Colour	-	Orange	Orange	Gold/Pink	Pink/ Mauve	Pink/ Mauve	Visual
Reinforcement	-	None	Yes	Yes	Yes	Yes	Visual
Thermal Properties							
Thermal resistance R_{th}	K/W	0.8	0.8	-	-	-	Kerafol*
Thermal impedance R_{ti}	°Cmm²/W	322	322	-	-	-	Kerafol*
	Kin²/W	0.5	0.5	-	2.11	1.68	Kerafol*
Thermal conductivity λ	W/m-K	1.5	1.5	0.8	0.8	1.0	ASTM D5470
Electrical Properties6							
Breakdown voltage $U_{d;ac}$	kV	6	6	6	6	6	ASTM D149
Dielectric breakdown $E_{d;ac}$	kV/mm	12	12	-	-	-	ASTM D149
Volume resistivity	Ωm	61.3 x 109	61.3 x 109	1 x 1011	1 x 1011	1 x 1011	ASTM D257-3
Dielectric loss factor tan σ	1	153 x 10-3	153 x 10-3	-	-	-	ASTM D150
Dielectric constant ε_r	1	4.28	4.28	5.5	5.5	5.5	ASTM D150
Mechanical Properties							
Measured thickness (+/-10%)	mm	0.500	0.500	0.500	0.500	0.500	ASTM D734
Hardness	Shore 00	10 – 25	10 – 25	25 - 40	25 - 35	5 – 15	ASTM D2240
Tensile strength	N/cm²	23.6	23.6	-	-	-	ASTM D412
Physical Properties							
Operating temperature	°C	-40 to +180	-40 to +180	-60 to +200	-60 to +200	-60 to +200	Kerafol
Density	g/cm³	2.0	2.0	1.6	1.6	1.6	Kerafol
Flame rating	UL 94	VO	VO	VO	VO	VO	*U.L. E140693
Total Mass Loss (TML)	Ma.-%	<0.29	<0.29	-	-	-	ASTM E 595
Thickness available	mm	0.5 – 5.0	0.5 – 5.0	0.5 – 5.0	0.5 – 5.0	0.5 – 5.0	Kerafol
Size	mm	250 x 450	250 x 450	203 x 406	203 x 406	203 x 406	Kerafol
Note* Data should not be used as specification.							

This comparison information are information gathered from users that have used Kerafol® as alternative to Gap pad VO series. Users are advise to test Kerafol® product to determine its suitability prior to putting it to use.
Kerafol® distributor with more than 30 years of thermal management experience is available to assist you with your questions.

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