

SOFTTHERM[®]



Thermally Conductive Compressible Silicone Free Pad

Overview:

SOFTTHERM[®] compressible thermally conductive silicone free pad is an alternative to silicone based pad. Designed to be highly conductive that provide well-balanced thermal, electrical, dielectric behaviour providing good surface conformability with low outgassing.

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

Applications:

■ Automotive ■ Telecommunication ■ Optical Devices ■ Other Silicone Sensitive Electronics.



Non-Reinforced Compressible Thermally Conductive Silicone Free Pad

Properties	Unit	U 281	Test Method
Colour	-	Grey	Visual
Reinforcement	-	None	Visual
Thermal Properties			
Thermal resistance R _{th}	K/W	<0.6	Kerafol
Thermal impedance R _{ti}	°Cmm²/W	240	Kerafol
	Kin²/W	0.37	Kerafol
Thermal conductivity λ	W/m-K	2.0	ASTM D5470
Electrical Properties			
Breakdown voltage U _{d;ac}	kV	7	ASTM D149
Dielectric breakdown E _{d;ac}	kV/mm	14	ASTM D149
Volume resistivity	Ωm	5.32 x 10 ⁹	ASTM D257-3
Dielectric loss factor tan $\boldsymbol{\sigma}$	1	78 x 10 ⁻³	ASTM D150
Dielectric constant ϵ_{Γ}	1	5.57	ASTM D150
Mechanical Properties			
Measured thickness (+/-10%)	mm	0.500	ASTM D734
Hardness	Shore 00	55 -65	ASTM D2240
Young's Modulus	N/cm ²	290	ASTM D412
Physical Properties			
Operating temperature	°C	-40 to +130	Kerafol
Density	g/cm ³	1.5	Kerafol
Flame rating	UL 94	VO	U.L. E140693
Total Mass Loss (TML)	Ma%	<0.9	ASTM E 595
Thickness available	mm	0.5 - 3.0	Kerafol

* 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.