Phase change

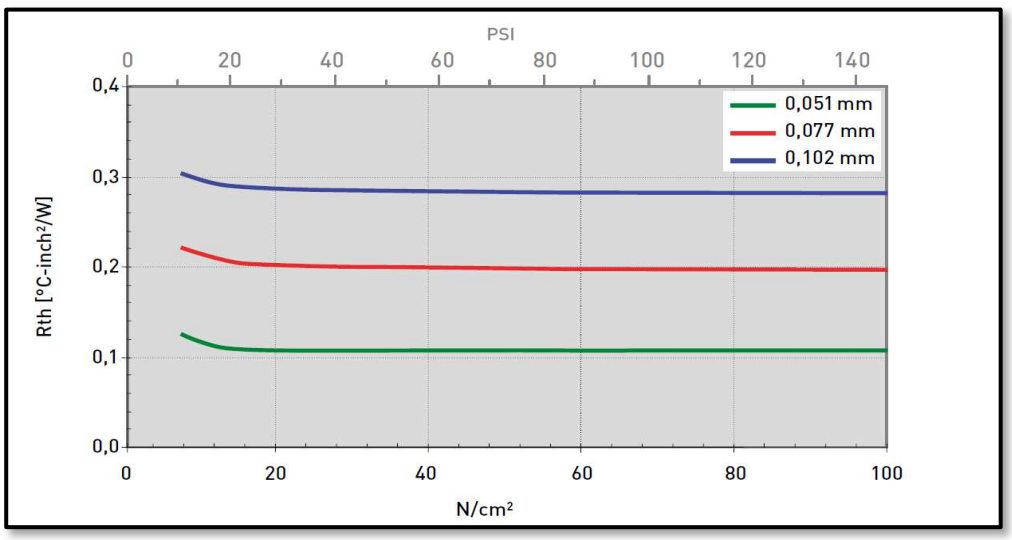
Our Thermal Foams, also known as TPC, are phase-changing thermo-conductive materials that solve heat dissipation problems. TPC_P_KA is a thermally conductive film with a Kapton®MT electrical insulator coated with a thermally conductive phase change compound on both sides where a low cooling requirement is required. Indeed, it is an excellent thermal conductor of 0.45W/ mK, with a good thermal resistance facilitating the transfer of heat and does not have electrical insulation. We can cut according to customer plan. All our mattresses are certified UL 94 in V0.

Application areas: Electronic components - Electric vehicles, 5G, Automatic control system, Mobile phone, AIOT, HPC (High Performance Computing), Server, IC, CPU, MOS, LED motherboard, Power supply, Heat sink, LCD-TV, Laptop, PC, Telecommunication device, Wireless hub, DDR module ll, etc.

Technical characteristics

Features	Unit	TPC_P_KA			
Thickness	µm	51	77	102	-
Reinforcement	-	Kapton®MT with phase change on both sides			
Color	-	Light Orange			
Tensile strength	kpsi	20.0	22.0	23.0	-
Sizes	mm	610 x 394 or roll			
Resistance @150Psi	°C-inch²/W	0.110	0.195	0.285	-
Resistance @30 Psi		0.113	0.200	0.290	-
Resistance @10 Psi		0.125	0.213	0.300	-
Devinall TH Thermal Conductivity	W/mK	0.45			
Temperature phase change	°C	ca. 60			
Breakdown voltage	kV / AC	5.50	9.20	12.30	-
Volume resistance	0hm - cm	1.0×10^{14}			
Contante dielectric	@ 1 MHz	4.2			

The TPC_P_KA is available in 51/77/102µm thicknesses.



The results were obtained under laboratory conditions and should be considered only as an indication. As AB2E has no control over its customers' equipment and many other factors, it is the user's responsibility to carry out its own tests to ensure that the product corresponds to its needs.