

K177




Thermal Products Division

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K177	Material	Thermal Impedance °C/W (Area:TO3)	Breakdown Voltage (V) 50Hz RMS	UL-Rating
Property	Silicone / Fibre glass	0.45	3500	94V0
Test Method		ASTM D5470	ASTM D149	UL Test

	Description
	<p>Kool Pad K177 is a standard thermally conductive, conformable, interface material. It has been designed to be used between component and heatsink to eliminate air gaps and improve the efficiency of heat transfer.</p> <p>K177 uses effective thermal fillers to produce a thermal performance that is the equivalent to standard mica and grease. The silicone nature of the product also gives a voltage isolation of 3500V (50Hz rms).</p> <p>K177 conforms to the UL flame retardant rating of 94V-0 and is recognized under file number E123456</p>

Ordering Information	Key Performance Properties	
Standard sheet sizes are 300mm x 300mm each. Adhesive Backed K177-AC-30x30 Non Adhesive K177-NA-30x30 An extensive range of pre-cut profiles is also available, see additional datasheet for details.	Low thermal resistance with high voltage isolation.	
	Fills air gaps between components up to 15% of the pads thickness.	
	Available in Kool-Tak adhesive backed*, or non-adhesive backing.	
	Remains resistant to cleaning agents, and does not support organic growth.	
	No known deterioration over time.	
	Easily cut at room temperature into most configurations using steel rule dies or sharp blades.	
	Low tooling costs for custom profiles.	
	*Kool-Tak is a unique adhesive blend, which contains its own thermal particles, thus reducing the thermal resistance of a standard adhesive pad still further.	
Technical Information	Property	Test Standard
Thickness (mm)	0.177 ± 0.02	
Thermal Conductivity Wm ⁻¹ K ⁻¹	0.79	MIL-I-49456A
Thermal resistance per cm ²	2.70°C/W	
Hardness	80 ± 5	Shore Micro
Tear Resistance kN/m	50	ASTM D624
Tensile Strength MPa	16	ASTM D412
Dielectric Constant 1000Hz	2.6	ASTM D150
Elongation %	30	ASTM D412
Colour	Grey	
Comparative Tracking Index	320	
Temperature Range	-60°C to 180°C	