

Thermal Management Materials, 6017 Material

Product Summary

MAJR 6000 Series thermal Management materials consist of sheet, adhesive, grease compounds and tape; these thermal materials are used in a wide variety of markets such as LED, chip sets for IC controller packages, IT for industrial and personal computers, DRAM Modules, telecom devices, automotive control units, and many other products for military and commercial markets.

Product Application (6017)

This thermally conductive insulator material exhibits excellent insulating capabilities at >6.5KV along with a thermal conductivity of 0.7W/m-k. In addition, this material exhibits 85 Shore hardness for good cut-through capability. It is excellent for applications such as: power supplies, motor controls, and power semiconductors. The material can be supplied in sheet, roll form, and die-cut parts to your specification. Standard thickness is: 0.16mm, +/- 0.025mm.



Product Technical Data (6017)

Physical

Property	Value	Test method
Carrier	Kapton	— — —
Color	Yellow	— — —
Hardness (Shore A)	85 ± 5°	ASTM D 2240
Tensile Strength (Kg/cm ²)	60	ASTM D 412
Elongation (%)	570.6	ASTM D 412
Continuous Use Temp (°C)	-60 °C ~ 200 °C	TGA+DMA

Technical Data (6017) continued

Electrical

Volume Resistivity ($\Omega \cdot \text{cm}$)		10^{14}	ASTM D 257
Breakdown Voltage (KV)		>6.5	ASTM D 149
Dielectric Constant (ϵ)	60 Hz	3.4	ASTM D 150
	1K Hz	3.36	
	1M Hz	3.24	
Dielectric Dissipation	60 Hz	0.015	ASTM D 150
	1K Hz	0.007	
Factor ($\tan\delta$)	1M Hz	0.005	
UL-94		V-0	UL 94

Thermal

Thermal Conductivity (W/m-K)	0.7	ASTM D5470
Thermal Resistance@25PSI/T16	$0.23^{\circ}\text{C} \cdot \text{in}^2/\text{W}$	ASTM D5470