

Thermal Management Materials (6000 Series)

MAJR 6000 thermal Management materials consist of sheet, adhesive, and grease compounds; 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 a variety of other products used in military and commercial markets.



Product Application (6001 - 6023) The thermal materials described below are incorporated in our 6000 Series for thermal interface materials.

- All materials are rated at UL 94 VO
- Colors are varied dependant on material
- Other material specifications such as thickness, standard sheet size, density, and resistance are available upon request.

Product Technical Data (6001) — Thermal Pad

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	1.7	W/m-k	ASTM D5470
Hardness	5.0	Shore A	ASTM D2240
Dielectric breakdown	>10	KV	ASTM D149

Product Technical Data (6002) – Thermal Pad

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	1.6	W/m-k	ASTM D5470
Hardness	15	Shore A	ASTM D2240
Dielectric breakdown	>7	KV	ASTM D149

Product Technical Data (6003) – Thermal Pad

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	2.2	W/m-k	ASTM D5470
Hardness	10	Shore A	ASTM D2240
Dielectric breakdown	>5	KV	ASTM D149

Product Technical Data (6004) – Thermal Pad

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	3.2	W/m-k	ASTM D5470
Hardness	20	Shore A	ASTM D2240
Dielectric breakdown	>7.0	KV	ASTM D149

Product Technical Data (6005) – Conductive Grease

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	3.6	W/m-k	ASTM D5470
Hardness	-	Shore A	ASTM D2240
Dielectric breakdown	1.0 at 0.1mm	KV	ASTM D149

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Product Technical Data (6007) – Thermal Pad

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	0.8	W/m-k	ASTM D5470
Hardness	20	Shore C	ASTM D2240
Dielectric breakdown	>4	KV	ASTM D149

Product Technical Data (6008) – Thermal Pad

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	1.0	W/m-k	ASTM D5470
Hardness	30	Shore C	ASTM D2240
Dielectric breakdown	>6	KV	ASTM D149

Product Technical Data (6009) – Thermal Pad

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	1.0	W/m-k	ASTM D5470
Hardness	15	Shore C	ASTM D2240
Dielectric breakdown	>6.3	KV	ASTM D149

Product Technical Data (6010) – Thermal Pad

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	1.2	W/m-k	ASTM D5470
Hardness	15	Shore C	ASTM D2240
Dielectric breakdown	>6.5	KV	ASTM D149

Product Technical Data (6011) – Thermal Pad

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	1.5	W/m-k	ASTM D5470
Hardness	25	Shore C	ASTM D2240
Dielectric breakdown	>5.2	KV	ASTM D149

Product Technical Data (6012) – Thermal Pad

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	2.0	W/m-k	ASTM D5470
Hardness	25	Shore C	ASTM D2240
Dielectric breakdown	>6	KV	ASTM D149

Product Technical Data (6013) – Thermal Pad

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	2.5	W/m-k	ASTM D5470
Hardness	25	Shore C	ASTM D2240
Dielectric breakdown	>5.3	KV	ASTM D149

Product Technical Data (6014) – Thermal Pad

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	3.0	W/m-k	ASTM D5470
Hardness	25	Shore C	ASTM D2240
Dielectric breakdown	>4.8	KV	ASTM D149

Product Technical Data (6015) – Thermal Insulator

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	0.8	W/m-k	ASTM D5470
Hardness	75	Shore A	ASTM D2240
Dielectric breakdown	>4	KV	ASTM D149

Product Technical Data (6016) – Thermal Insulator

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	1.0	W/m-k	ASTM D5470
Hardness	85	Shore A	ASTM D2240
Dielectric breakdown	>4	KV	ASTM D149

Product Technical Data (6017) – Thermal Insulator

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	0.7	W/m-k	ASTM D5470
Hardness	85	Shore A	ASTM D2240
Dielectric breakdown	>6.5	KV	ASTM D149

Product Technical Data (6018) – Thermal Tape

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	1.0	W/m-k	ASTM D5470
Hardness	(Tape – Fiberglass)	-	-
Dielectric breakdown	2 - 6	KV	ASTM D149

Product Technical Data (6019) – Thermal Tape

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	1.2	W/m-k	ASTM D5470
Hardness	Tape	-	-
Dielectric breakdown	1.57 – 2.29	KV	ASTM D149

Product Technical Data (6020) – Thermal Tape

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	0.75	W/m-k	ASTM D5470
Hardness	Tape – Glass Fabric	-	-
Dielectric breakdown	>4	KV	ASTM D149

Product Technical Data (6021) – Thermal Pad

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	4.72	W/m-k	ASTM D5470
Hardness	40	Shore A	ASTM D2240
Volume Resistivity	1.65 x 10 ⁷	Ohm/cm	ASTM D257

Product Technical Data (6022) – Thermal Pad

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	1.5	W/m-k	ASTM D5470
Hardness	54	Shore A	ASTM D2240
Volume Resistivity	1.38 x 10 ¹⁴	Ohm/cm	ASTM D257

Product Technical Data (6023) – Thermal Fabric

PROPERTY	RANGE	UNIT	TEST METHOD
Thermal conductivity	0.9	W/m-k	ASTM D5470
Hardness	Fabric	-	-
Volume Resistivity	1.0 x 10 ¹⁴	Ohm/cm	ASTM D257