

PRELIMINARY PRODUCT DATA SHEET



LEADER IN THERMAL MANAGEMENT: DESIGN, INNOVATION AND MATERIALS



CHO-THERM® T444 Thermally Conductive, Non-Silicone Insulators

DESCRIPTION

CHO-THERM T444 thermal interface material is a non-silicone formulation that provides good thermal performance with excellent electrical isolation. It consists of a high bond strength acrylic adhesive loaded with aluminum oxide particles and coated on one side of 0.001 inch (0.025 mm) thick Kapton[†] MT thermally conductive polyimide film.

APPLICATIONS

The high dielectric strength and exceptional durability provided by the polyimide carrier make CHO-THERM T444 material an excellent choice for electrically isolating power semiconductors in industrial instrumentation, motion control, AC/DC converters and other power conversion equipment. As a thermally loaded film system, CHO-THERM T444 insulators provide a low thermal impedance connection between the power component and its heat sink or chassis.

TYPICAL PROPERTIES		T444	TEST METHOD
CONSTRUCTION	Filler	Aluminum Oxide	—
	Carrier	Kapton MT	—
	Color	Beige	Visual
	Thickness, inch (mm)	0.003 (0.08)	ASTM D374
THERMAL	Thermal Impedance, °C-in ² /W (°C-cm ² /W)	0.37 (2.39)	ASTM D5470
	Thermal Conductivity, W/m-K	0.38	ASTM D5470
	Operating Temperature Range, °C	-60 to +150	—
ELEC.	Voltage Breakdown, Vac	5000	ASTM D149
	Volume Resistivity, ohm-cm	1 x 10 ¹⁴	ASTM D257
MECHANICAL	Tensile Strength, psi (MPa)	3000 (20.68)	ASTM D412
	Tear Strength, lb/in (kN/m)	150 (26.3)	ASTM D624
	Hardness (Shore A)	90	ASTM D2240
	Specific Gravity	1.80	ASTM D792
	UL Flammability Rating	V-0	UL94

ORDERING INFORMATION

CHO-THERM T444 thermal interface material is available in standard 100 ft. rolls of various widths from 0.50 inch (12.7 mm) to 2.00 inch (50.8 mm). Custom widths are available, as are pre-cut parts supplied as kiss-cut pieces on a roll.

Part Numbering

The part number 66-10-0150-T444 refers to a 100 ft. roll of 1.50 inch (38.1 mm) wide T444 material. Contact Chomerics for assistance with part numbers.

[†] Trademark of DuPont