## PRELIMINARY PRODUCT DATA SHEET



LEADER IN THERMAL MANAGEMENT: DESIGN, INNOVATION AND MATERIALS



## CHO-THERM® T441 Commercial Grade Thermal Interface Material

## **DESCRIPTION**

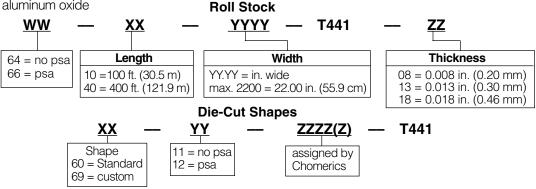
CHO-THERM T441 low-cost thermally conductive insulators are designed for applications requiring a high level of dielectric breakdown protection. CHO-THERM T441 pads provide good thermal conductivity and extremely high electrical insulation, even when used in humid environments.

Consisting of a special silicone binder loaded with aluminum oxide

particles, CHO-THERM T441 pads provide outstanding isolation under most environmental conditions. They are reinforced with fiberglass cloth to provide maximum resistance to tear, cut-through and punctures due to burrs and other surface irregularities. CHO-THERM T441 material is non-nutritive and does not promote fungal growth.

## **ORDERING INFORMATION**

CHO-THERM T441 material is available in standard thicknesses of 0.008 inch (0.20 mm), 0.013 inch (0.30 mm) and 0.018 inch (0.45 mm), as well as custom thicknesses. An optional pressuresensitive adhesive facilitates assembly and production. Use the diagrams below to construct the appropriate part number.



	TYPICAL PROPERTIES		T441		<b>TEST METHOD</b>
CONSTRUCTION	Filler		Aluminum Oxide		_
	Binder		Silicone		_
	Carrier		Fiberglass		_
	Color		Pink		Visual
	Thickness, inch (mm)	0.008 (0.20)	0.013 (0.30)	0.018 (0.46)	ASTM D374
THERMAL	Thermal Impedance, @ 300 psi, °C-in²/W (°C-cm²/W)	0.41 (2.65)	0.56 (3.62)	0.64 (4.14)	ASTM D5470
	Thermal Conductivity, W/m-K	1.0	1.1	1.1	ASTM D5470
	Operating Temperature Range, °C		-60 to +200		_
ELECTRICAL	Voltage Breakdown – Dry, Vac	8700	11,400	13,800	ASTM D149
	Voltage Breakdown – Wet, Vac	8100	10,500	12,900	ASTM D149
	Volume Resistivity – Dry, ohm-cm	1 x 10 <sup>14</sup>	1 x 10 <sup>14</sup>	1 x 10 <sup>14</sup>	ASTM D257
	Volume Resistivity – Wet, ohm-cm	1 x 10 <sup>14</sup>	1 x 10 <sup>14</sup>	1 x 10 <sup>14</sup>	ASTM D257
MECHANICAL	Tensile Strength, psi (MPa)	3200 (22.08)	2500 (17.25)	2000 (13.80)	ASTM D412
	Elongation, %	40	30	30	ASTM D412
	Hardness (Shore A)	90	90	90	ASTM D2240
	Specific Gravity	2.55	2.55	2.55	ASTM D792
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