



## DESCRIPTION

THERM-A-GAP™ - T63X products are highly conformable, pre-cured, single-component compounds. These unique materials result in much lower mechanical stress on delicate components than even the softest gap-filling sheets. They

are ideal for filling variable gaps between multiple components and a common heat sink. T63X products are available with 0.25mm (0.010") diameter glass beads to create compression stops for applications requiring electrical isolation.

## FEATURES / BENEFITS

- Dispensable
- Fully cured
- No settling in storage
- Highly conformable at low pressures
- Ideal for gap sizes 0.12 to 2.54mm (0.005" to 0.100")
- Available with 0.25mm (0.010") glass bead compression stops for electrical isolation

## TYPICAL APPLICATIONS

- Engine and transmission control modules
- Memory modules
- Power conversion equipment
- Power supplies and uninterruptible power supplies
- Power semiconductors
- MOSFET arrays with common heat sinks
- Televisions and consumer electronics
- Voltage regulators

THERM-A-GAP™ T63X Series Dispensed Thermal Gels					
	Typical Properties	T630/T630G	T635	T636	Test Method
Physical	Color	White	White	Yellow	Visual
	Flow Rate, cc/min - 30cc taper tip, 0.130" orifice, 90psi (621 kPa)	10	8	8	Chomerics
	Specific Gravity	2.25	1.20	1.20	ASTM D792
	Percent Deflection @ Various Pressures	% Deflection	% Deflection	% Deflection	ASTM C165 MOD (0.125 in "G" Type, 0.50 in diameter, 0.025 in/min rate)
Thermal	@ 34 kPa (5 psi)	28	17	17	
	@ 69 kPa (10 psi)	43	33	33	
	@ 172 kPa (25 psi)	50	45	45	
	@ 345 kPa (50 psi)	>60	>60	>60	
Electrical	Thermal Conductivity, W/m-K	0.7	1.7	2.4	ASTM D5470
	Heat Capacity, J/g-K	1.1	0.9	0.9	ASTM E1269
	Coefficient of Thermal Expansion, ppm/K	350	400	400	ASTM E831
	Operating Temperature Range, °C(°F)	-55 to 200 (-67 to 392)	-55 to 200 (-67 to 392)	-55 to 200 (-67 to 392)	--
Regulatory	Dielectric Strength, KVac/mm (Vac / mil)	5.0 (200)	5.0 (200)	5.0 (200)	ASTM D149
	Volume Resistivity, ohm-cm	10 <sup>14</sup>	10 <sup>14</sup>	10 <sup>14</sup>	ASTM D257
	Dielectric Constant @1,000 kHz	5.5	4.0	4.0	ASTM D150
	Dissipation Factor @ 1,000 kHz	0.010	0.003	0.003	Chomerics
Regulatory	Flammability Rating (See UL File E140244 for Details)	V-0	Not Tested	V-0	UL 94
	RoHS Compliant	Yes	Yes	Yes	Chomerics Certification
	Outgassing, % TML	0.55	0.5	0.4	ASTM E595
	Shelf Life, months from date of manufacture	18	18	18	Chomerics

## THERM-A-GAP™ T63X Series Dispensed Thermal Gels

### PRODUCT ATTRIBUTES

#### T630 / T630G

- Years of proven reliability in high-volume automotive applications
- General use material
- Good thermal performance
- Low deflection force required
- Minimal stress on components
- "G" version has 0.010" glass beads as compression stops for electrical isolation

#### T635

- Excellent thermal performance
- Low deflection force required
- Minimal stress on components

#### T636

- Superior thermal performance
- Solves the toughest heat transfer problems
- Low deflection force required
- Minimal stress on components

## Ordering Information

These materials are available in the following formats.  
Contact Chomerics for custom widths, part sizes, etc.

### PART NUMBERS

65-00-T6XX - 0010	10 CC SAMPLE
65-00-T6XX - 0030	30 CC CARTRIDGE
65-00-T6XX - 0180	180 CC CARTRIDGE
65-00-T6XX - 0300	300 CC CARTRIDGE
69-11-24419-T630	25 KG KIT
69-11-25177-T630	1 GAL PAIL (5 KG )

Dispensing Equipment Options	Optional Supplier	Description
Hand-Gun Pneumatic Dispensing 300cc cartridges	Bergdahl Associates	Semco Model 550
Hand-Gun Pneumatic Dispensing 180cc (6oz) cartridges	Bergdahl Associates	Model 250A-6oz Sealant Gun
<a href="http://www.bergdahl.com">http://www.bergdahl.com</a>		
Pneumatic Shot Size Controllers 30cc, 180cc and 300cc Shot Size Dispensing Equipment	EFD	Ultra 2400 Series
		Ultra 1400 Series
		Ultra 870 Series
30cc/55cc Adapter Assembly	EFD	10000D5152
Dispensing Sleeve to support 6oz (180cc) Semco Tubes	EFD	5192-6
SEMCO is a trademark of Semco, Inc. <a href="http://www.efd-inc.com">http://www.efd-inc.com</a>		



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