THERM-A-GAP™ GEL45

High Performance Fully Cured Dispensable GEL



Product Family Description

Parker Chomerics fully cured dispensable GELs eliminate time consuming hand assembly, decreasing installation costs and reducing customer manufacturing and purchasing (logistical)complexity. These roducts require no mixing or curing, providing superior design fl exibility.

- Provides low thermal impedance at thin and thick gaps, allowing use of common heat spreaders
- Deflects easily under very low compressive forces, decreasing stress on components thus decreasing component failures.

Typical Applications

- Automotive Electronic Control Units (ECU's)
- Power Supplies & Semiconductors
- Memory & Power Modules
- Microprocessors / Graphics Processors
- Flat Panel Displays & Consumer Electronics

Features/Benefits

- Easily dispensable
- Fully-cured / No pump out
- High bulk thermal conductivity
- Low thermal impedance
- Ultra low compression force
- High tack surface & reworkable
- Proven long-term reliability

Product Attributes

- Accommodates a variety of bond line thicknesses for application to multiple devices
- Excellent performance-to-price
- Compatible with high volume, automated dispense processes
- Meets Telcordia (Bellcore) silicone specifications
- High Bulk Thermal Conductivity

	Typical Properties	GEL 45	Test Method
Physical	Color	Black	Visual
	Flow Rate, grams/min - 30cc syringe with no tip attachment 0.100" orifice, 90psi (621 kPa)	55	Chomerics
	Specific Gravity	3.1	ASTM D792
	Typical minimum bondline thickness, in (mm)	0.0035 (0.0889)	--
Thermal	Thermal Conductivity, W/m-K	4.5	ASTM D5470
	Heat Capacity, J/g-K	1	ASTM E1269
	Coefficient of Thermal Expansion, ppm/K	150	ASTM E831
	Operating Temperature Range, °F (°C)	-67 to 392 (-55 to 200)	--
Electrical	Dielectric Strength, Vac / mil (KVac/mm)	200 (8)	ASTM D149 MOD
Regulatory	Flammability Rating	V-0	UL 94
	RoHS Compliant	Yes	Chomerics Certification
	Outgassing, % TML (CVCM)	0.26 (0.06)	ASTM E595
	Shelf Life, months from date of manufacture	18	Chomerics

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