

THERM-A-GAP™ GEL 20

Highly Reliable Fully Cured Dispensable GEL



Customer Value Proposition

Parker Chomerics THERM-A-GAP GEL 20 is a moderate performance, one component, dispensable thermal interface material with 2.4 W/m-K thermal conductivity developed with high reliability for the automotive industry.

The material's heavy paste-like consistency enables controlled dispensing, applied in variable thicknesses up to 4mm to suit application needs. THERM-A-GAP GEL 20 requires low compressive force to deform under assembly pressure, subjecting components, solder joints and leads to minimal stresses.

It is formulated to accommodate today's high reliability requirements for thermal cycling & high temperature environments.



Product Features

- Thermal conductivity: 2.4 W/m-K
- Easily dispensed
- Low compression force
- No secondary cure required
- Excellent consistency and long term reliability
- Low oil bleeding
- Resists movement under vibration
- Superior Tackiness

Typical Applications

- Automotive electronic control units (ECUs)
- Converter & Inverter & OBC
- ADAS control Module
- Vehicle Infotainment
- Power Supplies & Semiconductors
- Memory & Power Modules
- Microprocessors / Graphics Processors
- Flat Panel Displays & Consumer Electronics

THERM-A-GAP™ GEL 20 Product Information

Typical Properties†		GEL 20	Test Method
Physical	Color	Dark Blue	Visual
	Flow Rate, g/min - 30cc syringe with no tip, 0.100" orifice, 90psi (621 kPa)	24	Chomerics
	Specific Gravity	2.85	ASTM D792
	Typical minimum bondline thickness, in(mm)	0.004 (0.10)	Chomerics
Thermal	Thermal Conductivity, W/m-K	2.4	ASTM D5470
	Heat Capacity, J/g-K	1.25	ASTM E1269
	Coefficient of Thermal Expansion, ppm/K	(waiting for test data)	ASTM E831
	Operating Temperature Range, °F (°C)	-67 to 392 (-55 to 200)	Chomerics
Electrical	Dielectric Strength, Vac/mil (Kvac/mm)	200 (8.0)	ASTM D149
	Volume Resistivity, ohm-cm	10 ¹²	ASTM D257
	Dielectric Constant @ 1,000 kHz at and at 0.01" (0.25mm) thick	4	ASTM D150
	Dissipation Factor @ 1,000 kHz at and at 0.01" (0.25mm) thick	0.003	Chomerics
Regulatory	Flammability Rating (See UL File E140244 for Details)	V-0	UL 94
	RoHS Compliant	Yes	Chomerics Certification
	Outgassing, % TML (% CVCM)	0.27 (0.06)	ASTM E595
	Shelf Life, months from date of manufacture	18	Chomerics
	Storage Conditions, °F (°C) @ 50% Relative Humidity	50 to 90 (10 to 32)	Chomerics

† Typical properties: these are not to be construed as specifications.

Part Number	Typical Standard Fill Volume (cc)	Standard Fill Mass	Packaging Description
65-00-GEL20-0010	10	29g	10cc manual syringe
65-02-GEL20-0030	27	77g	30cc EFD plastic cartridge
65-02-GEL20-0180	150	428g	180cc EFD plastic cartridge
65-00-GEL20-0300	300	855g	300cc aluminum cartridge
65-1P-GEL20-3160	3160	9kg	1 US gal. pail
65-5P-GEL20-8620	8620	25kg	5 US gal. pail