

TIM-LGF-2005

Thermally Conductive, Two Part Silicone Liquid Gap Filler

DESCRIPTIONS

TIM-LGF-2005 is thermally conductive liquid gap filler materials formulated to provide a balance of cured material properties with “gel-like” modules and good compression set or memory. This Form-in-Place liquid gap filler is ideal for applying any thickness. Unlike cured thermal pad, a liquid approach offers infinite thickness variations with little or no stress to sensitive components during assembly process..

TIM-LGF-2005 flows under pressure like grease, easily cures at room or elevated temperature and form in soft rubber/gel and adheres to most surfaces, forms shapes and sizes of components with very low compression force. It eliminates multiple pad thickness and die-cut shapes for individual applications. It can be applied like grease, easily dispensable from wide range of commercially available equipment.

KEY FUTURES AND BENEFITS

- **Thermal Conductivity (1.2 W/m-K)**
- Ultra-conforming, wet-out. Designed for fragile and low stress applications
- **Very soft, low hardness/Gel type cure**
- Relieves CTE Stress during thermal cycling

APPLICATIONS

- Interface for semiconductors requiring low pressure or spring clamp mounting
- Flip chip microprocessors, Graphic chips
- PPGA's, BGA, Micro BGA, DSP chips, LED
- Automotive electronics (ECU's)
- Thermally conductive vibration dampening

AVAILABILITY

50cc & 400cc dual Syringes/Cartridges, 2 gallon & 10 gallons Kits

Property	Test Method	Value
Type		Two Parts Silicone, curable
Special Futures		Very soft, gel type cure, excellent deflection value
Color	Visual	Grey
Mixed Viscosity. PaS	Brookfield	73
Mix Ratio		1:1
Specific Gravity	ASTM D792	2.0
Hardness (Shore 00)	ASTM D2240	<5
Pot Life @ 25°C		90 min
Cure Time @ 25°C		24-48 hrs
Cure Time @ 100°C		30 min
Flammability (Equivalent)	UL 94	V-0
Operating Temperature Range.		-55°C to 204°C
Shelf Life (Unopened)		12 months
THERMAL		
Thermal Conductivity (W/m-K)	ASTM D5470	1.2
ELECTRICAL		
Breakdown Voltage (KV/mm)	ASTM D149	12
Volume Resistivity (Ohm-m)	ASTM D257	10 ¹²

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