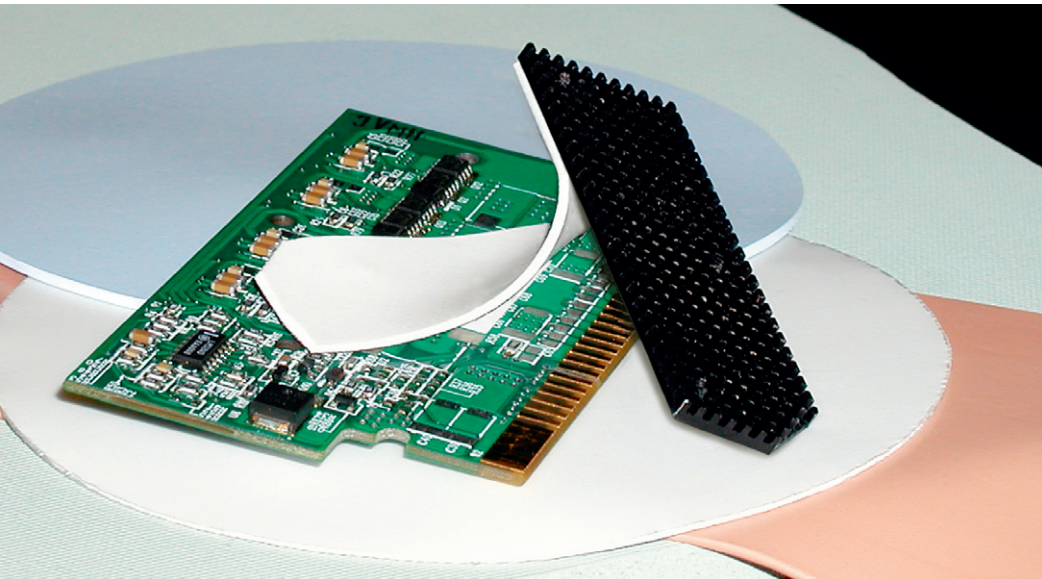


# ThermaCool™ Thermal Management Materials



The ThermaCool™ family of high performance thermally conductive Gap Fillers provide solutions to difficult thermal management problems. These products can be used fill gaps and enhance thermal performance of the electrical system. ThermaCool Gap Fillers can accommodate materials of different coefficients of thermal expansion with the compliant interface. The ThermaCool Gap Filler family includes products in various thicknesses and hardness's to effectively seal gaps while providing the thermal transfer needed in demanding electronic applications.

## Products and Description

- **R 10404:** Thermally conductive closed cell sponge for gasketing heat transfer and cushioning. Provided in sheets or yard goods for ease of cutting in thickness from 0.032 –0.250.
- **TC100:** Thermally conductive solid silicone rubber, provided in yard goods from 0.025 – 0.062 thick for filling air gaps under high load force.
- **TC100U:** Similar to the TC100 but supplied in a “B” Stage configuration to fill gaps and bond dissimilar materials in place providing a thermal transfer path.
- **TC 3000 Family:** Thermally conductive conformable silicone rubber, provided in 24" x 24" sheets from 15–220 mils thick for filling air gaps under high load force. The product has UL94 V-0 flame rating. The product is naturally tacky and has a very low thermal resistance.
  - TC3001: Very soft (5–10 Shore A)
  - TC3002: Soft (25–30 Shore A)
  - TC3005: Extremely soft (<5 Shore A)

*Simply the coolest*  
**THERMA  
COOL™**

## Thermally Conductive Gap Fillers

### Typical Applications

- Filling areas of irregular surfaces to provide a thermal interface to the heat sink
- Electrically isolating components while providing good thermal transfer to heat sinks
- Fits between CPU and Heat Spreader
- Heat Transfer pads in Memory Modules
- CD ROM Cooling
- Cushioning to remove damage caused by vibration
- Heat Pipe Assemblies

### Key Product Properties

- Gap Filling for Improved thermal Transfer
- Electrically Isolating
- Various durometers (Hardness) and thickness' to fill multiple gap thickness
- Conformable to compress to various under differing loads
- Excellent compression set resistance to return to original thickness even when compressed for extended times
- Can be supplied with or with out a High tack solvent resistant acrylic adhesive on one side for increased installation efficiency
- Silicone adhesive system is available for special applications
- UL flame retardant approvals
- Can be easily die cut for simple, low cost application

## Other Thermal Management Products

- **Thermally Conductive Fabrics**—Fabric reinforced silicone polymer sheets used to provide thermal management solutions where interface gaps are less than 15 mils.
- **Thermally Conductive Tapes**—Tape systems with thermally conductive adhesives and substrates that can either be electrically isolating/thermally conductive or only thermally conductive.
- **Phase Change Materials**—High performance systems to be used in the microelectronics area to conduct heat from microprocessors and other miniature electronic components

## Thermal Gap Fillers

Description	ThermaCool	Chomerics	Bergquist	Fujipoly
Non Conformable Conductive	TC100	N/A	N/A	Sarcon GTR
Non Conformable Conductive — Uncured	TC100U	Therm-A-Form T646	N/A	N/A
Conformable Closed Cell Sponge	R10404	N/A	N/A	N/A
Conformable Low Hardness	TC3001	Therm-A-Gap A174/T174/F174	Gap-Pad A2000	Sarcon HR, GR-d, GR
Conformable Medium Hardness	TC3002	Therm-A-Gap A274/T274	Gap-Pad 1500, 1500R	Sarcon HR, GR-d, GR
Very Conformable Very Soft	TC3005	Therm-A-Gap A574/574	Gap-Pad VO Ultra Soft, Gap-Pad 1500	N/A



*ThermaCool™ is a trademark.*

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