tyco Electronics

HeatPath GTQ 4000 Series

Phase Change Thermal Interface Materials

- **Unsupported film or with abrasion resistant carriers**
- **Very low mounting force**
- **Very low thermal resistance**
- **Easy to handle**
- **Dry, non-tacky surface**
- **Adhesive backed options available**

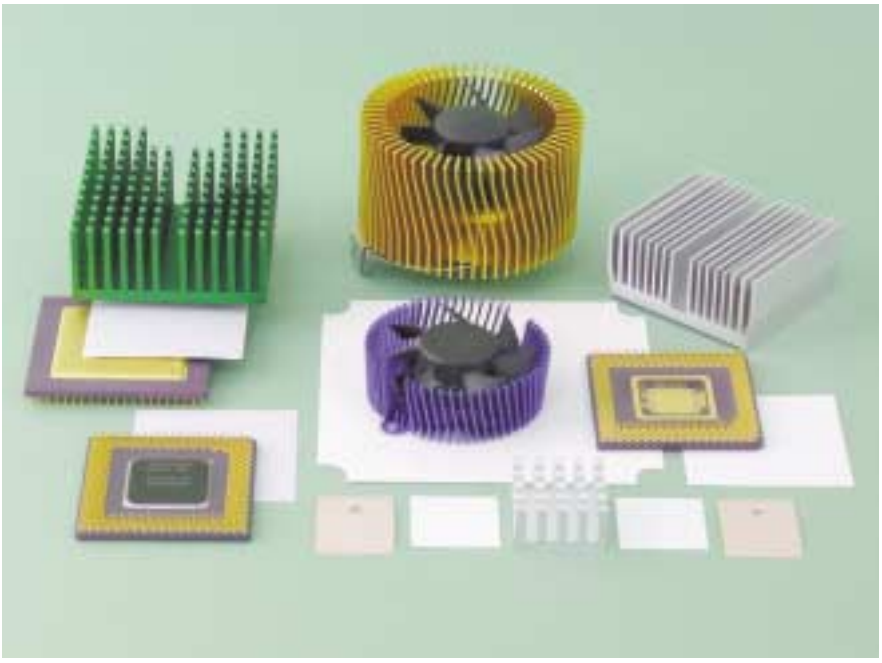
HeatPath GTQ-4000 Series Phase Change Thermal Interface Materials are designed to cost-effectively maximize heat transfer from power components such as CPUs or micropocessors to heat sinks. Above the phase change temperature, 52°C, the material flows and wets out the thermal interface surfaces to provide lowest thermal resistance. HeatPath GTQ-4000 Series Phase Change Thermal Interface Materials will not drip or run like grease and requires a very low mounting force, less than 5 psi, to cause flow making it feasible to use low pressure clips to hold components in place.

Heat Path GTQ-4000 Series Phase Change Thermal Interface Materials have excellent solvent resistant properties and are environmentally friendly.

Variety

HeatPath GTQ-4000 Series Phase Change Thermal Interface Materials are available in three different versions to meet the most demanding applications:

- GTQ-4100 Series, unsupported film for general applications
- GTQ-4200 Series, with polyimide film carrier for abrasion resistance and electrically insulating applications
- GTQ-4300 Series with Aluminum foil carrier for improved handling



Typical product properties

Test condition	Unit	4103	4213	4223	4233	4323
Carrier		None	0.001 inch Polyimide	0.002 inch Polyimide	0.003 inch Polyimide	0.002 inch Aluminum
Thickness	inch *(mm)*	0.005 *(0.127)*	0.002 *(0.051)*	0.003 *(0.076)*	0.004 *(0.102)*	0.003 *(0.076)*
Specific Gravity	g/cm^3	2.2	N/A	N/A	N/A	N/A
Thermal Resistance	$°C\text{-}in^2/W$	0.03	0.16	0.27	0.35	0.05
Dielectric Strength	KV	N/A	3.5	7	11	N/A
Phase Change Temperature	°C	52	52	52	52	52
Application Method		heat to apply	heat to apply	heat to apply	heat to apply	heat to apply

Ordering Information

Part numbering system

GTQ-4XXX-T0.XX-XXXX-XX

AD = Adhesive option

Product drawing number
0XXX = Stamped on sheets
1XXX = Stamped on rolls
2XXX = Unstamped sheets
3XXX = Individual stamped sheets
5XXX = Unstamped rolls

Product thickness
4103 = 0.005 (0.127 mm)
4213 = 0.002 (0.051 mm)
4223 = 0.003 (0.076 mm)
4233 = 0.004 (0.102 mm)
4323 = 0.003 (0.076 mm)

Material type
4103 = Unsupported film
4213 = With 0.001 inch polyimide film carrier
4223 = With 0.002 inch polyimide film carrier
4233 = With 0.003 inch polyimide film carrier
4323 = With 0.002 inch aluminum film carrier

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Contact your local sales representative for further information.

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