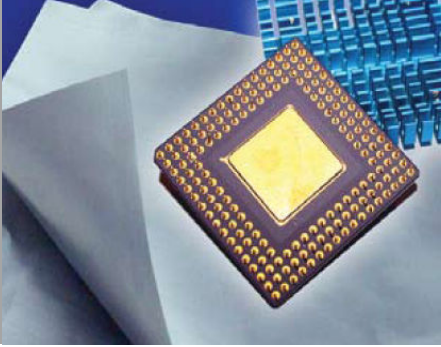


Product Data Sheet

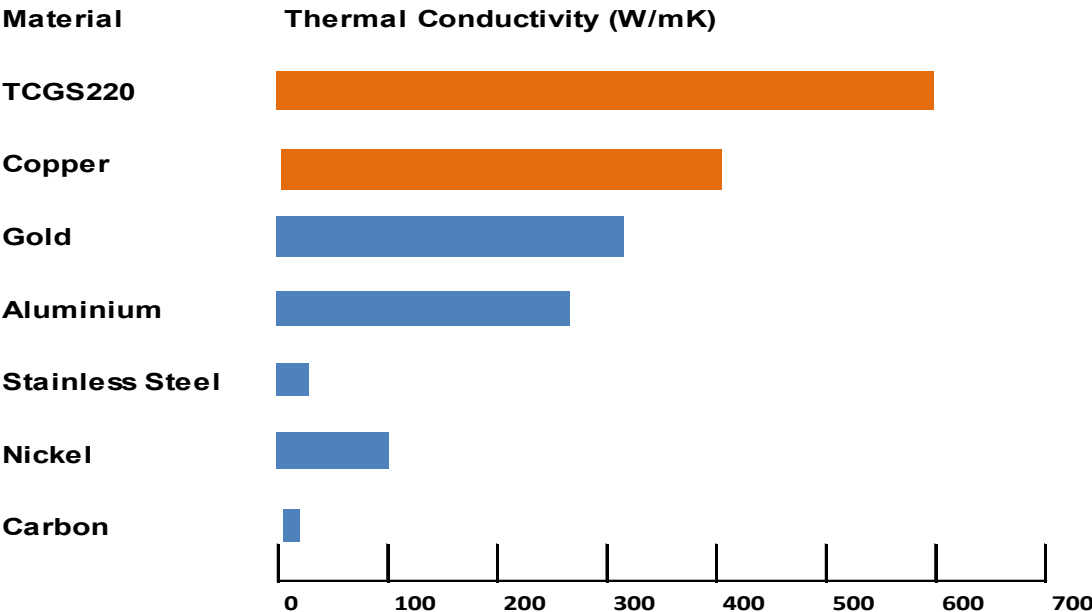


Thermal Interface Material – TCGS220

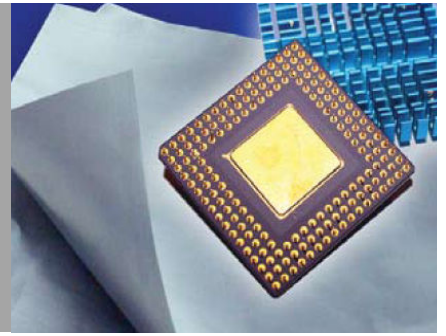
Designed for high power electronic devices applications, TCGS220 is a graphite-based thermal interface material which has been modified in its manufacturing process to enhance heat dissipation from the original heat source. This material is highly flexible and customized into different shapes and sizes based on the requirements of the application.

About Thermal Interface Material (TIM)

- Thermal interface material (TIMs) are used to transfer heat from a surface of higher thermal energy to another surface of lower surface energy.
- Such materials are commonly used to enable the heat transfer of high power semiconductor devices.
- Current TIM technologies include thermal grease or paste, phase change material, solder paste and thermally conductive adhesive tapes.
- The better the thermal conductivity, the lower the thermal resistance
- With the advancement of technology, higher expectation of performance in semiconductors and electronics will result in more heat generated, thus the need for better heat dissipation.



Product Data Sheet



Key Benefits

- Superior thermal conductivity (more conductive than copper, aluminium and ceramic materials)
- Environmentally friendly, does not contain any toxic ingredients
- Flexible and can be easily bent and trim to customized sizes
- Thin and lightweight
- Heat resistant up to 400°C

Areas of Application

- High power semiconductor devices
- Laptop, PC & servers
- Mobile phones, PDAs, DVD player, digital cameras

Technical Specification

Description/Type	Bare Type	Adhesive Tape	Metallic Adhesive	Insulative Adhesive
Part Number	TCGS220-N	TCGS220-AT	TCGS220-PBSA	TCGS220I-CC-BN
Surface Properties	Electrically Conductive	Electrically Insulating	Electrically Conductive	Electrically Insulating
Material	Graphite	Graphite	Graphite	Graphite
Film Thickness	100um	87um	120um	150um
Operating Temperature	400°C	150°C	120°C	120°C
Thermal Conductivity(X-Y)	600 W/mK	500 W/mK	600 W/mK	550 W/mK
Thermal Conductivity(Z)	15 W/mK	10 W/mK	18 W/mK	15 W/mK
Flexible Strength	20MPa	20MPa	20MPa	20MPa
Flame Rating	V-0	V-0	V-0	V-0
Density	1.0 g/cm ³	1.0 g/cm ³	1.0 g/cm ³	1.0 g/cm ³