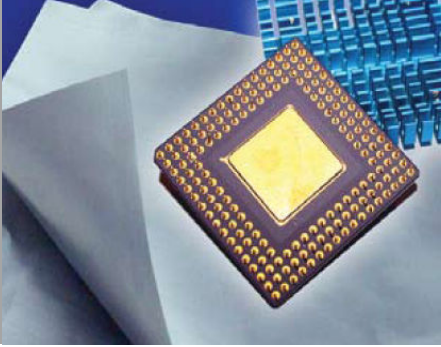


Product Data Sheet



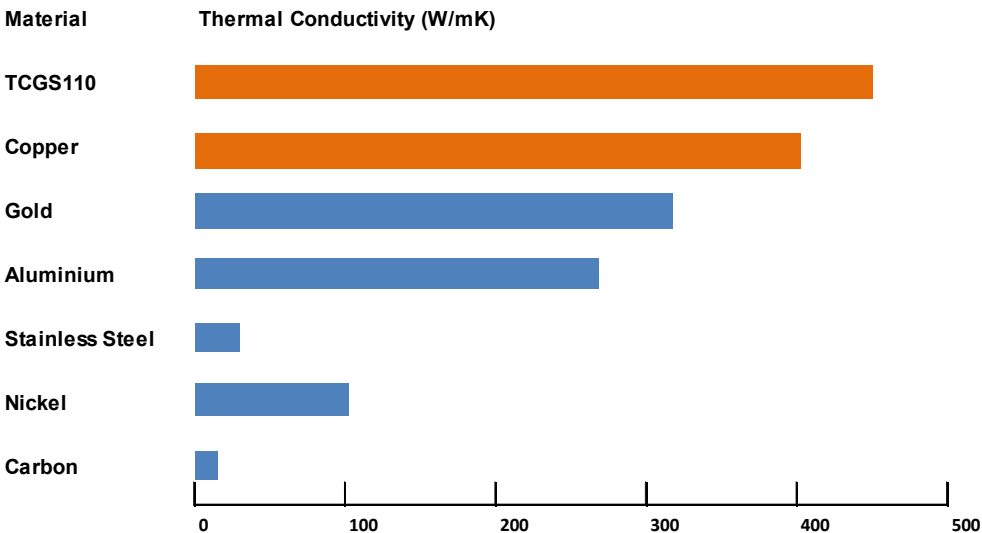
Thermal Interface Material – TCGS110

Designed for low/mid power electronic devices applications, TCGS110 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.

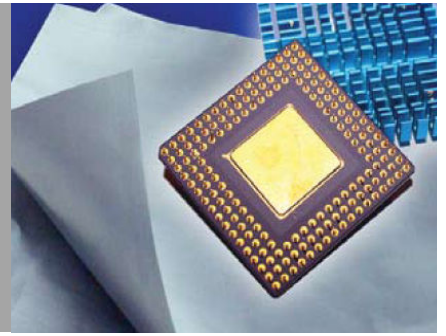
About Thermal Interface Material (TIM)

- 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 low/mid power semiconductor devices.
- Current TIM technologies include thermal grease or paste, phase change material, solder paste and thermally conductive adhesive tapes.
- 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.

Thermal Conductivity Comparison Chart



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

- Low/mid power semiconductor devices
- Laptop, PC & servers
- Mobile phones, PDAs, DVD player, digital cameras
- LEDs

Technical Specification

Description/Type	Bare Type		With Metallic Adhesive		With Adhesive Tape	
	TCGS110-B	TCGS110-BPET	TCGS110-SA	TCGS110-SAPET	TCGS110-AT	TCGS110-ATPET
Part Number	TCGS110-B	TCGS110-BPET	TCGS110-SA	TCGS110-SAPET	TCGS110-AT	TCGS110-ATPET
Surface Properties	Electrically Conductive	Electrically Insulating	Electrically Conductive	Electrically Insulating	Electrically Conductive	Electrically Insulating
Material	Graphite	Graphite/PET	Graphite	Graphite/PET	Graphite	Graphite/PET
Film Thickness	100um/200um	125um	100um	125um	125um	150um
Operating Temperature	400°C	180°C	120°C	120°C	180°C	180°C
Thermal Conductivity(X-Y)	450 W/mK	450 W/mK	450 W/mK	450 W/mK	450 W/mK	450 W/mK
Thermal Conductivity(Z)	10 W/mK	8 W/mK	12 W/mK	10 W/mK	8 W/mK	6 W/mK
Flexible Strength	18MPa	18MPa	18MPa	18MPa	18MPa	18MPa
Flame Rating	V-0	V-0	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	1.0 g/cm ³	1.0 g/cm ³