

Thermal conductive rubber

Thermal conductive rubber is silicone base material which was developed for the purpose of heat dissipation of devices which has complex interface.

Features



Excellent flexibility & softness

Heat dissipation can be very smooth by sticking to complex interfaces of devices firmly because of its excellent flexibility & softness

High thermal conductivity

High thermal conductivity is achieved by dispersing a special additive.

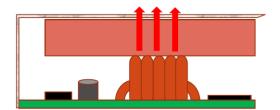
Great compressibility

Thermal resistance can be minimized because of its high compressibility.

> Flame retardant

UL approved and passed Glow-Wire Ignitability Test (GWI)

Conventional material (hard)



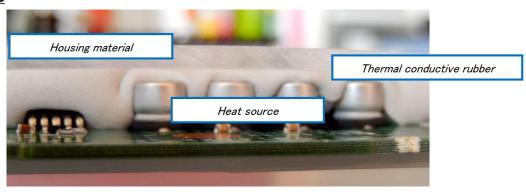
- The contact point is only the highest area of a device and there is gap (air) between the device and the thermal conductive material.
- The heat dissipation is not so good because thermal conductivity of air is very low.
- The thermal resistance is also higher because it is difficult to be compressed.

Thermal conductive rubber



- The thermal conductive rubber stick to the all complex interface of a device because of its flexibility and softness.
- The heat dissipation is excellent because there is less gap (less air).
- The thermal resistance is lower because it can be thinner by being compressed.

Example of use

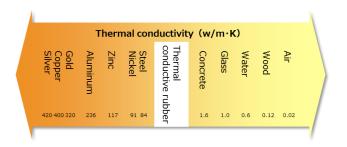




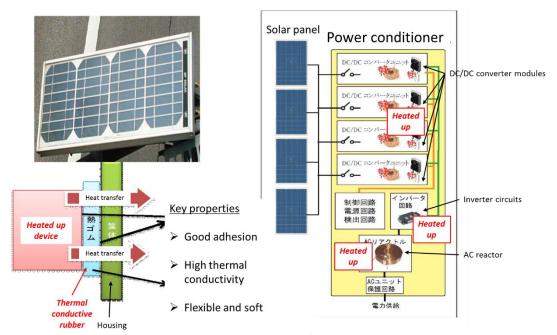
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Application

- > PV Inverter (Power conditioner)
- > Heat sink for LED light
- Camera modules
- > High density integrated circuit



Example of application: PV Inverter (Power conditioner)



General properties

Property	Unit	R6M	R7M	R10M	R13M	R6CC
Electrical conductivity	-	Insulative	Insulative	Insulative	Insulative	Conductive
Characteristic	_	High resilience	High adhesive	Low siloxane	Low adhesive	High thermal conductivity
Color	-	Greyish white	Greyish white	Greyish white	Greyish white	Blackish brown
Thickness	mm	1~20	3~20	1~20	1~20	1~20
Tg	°C	-41	-41	-41	-40	-39
Thermal conductivity	W/m•K	2.4	2.1	2.1	2.1	Z direction :8.2 XY direction:11
Specific gravity	_	2.4	2.4	2.4	2.3	1.5
Hardness	ASKER C	5~	5~	~3	~3	5~
Elongation at break	%	160~	200~	180~	200~	170~
Surface resistance	Ω	>1E15	>1E15	>1E14	>1E15	100~
Tensile strength	N/mm ²	4.1	-	4.1	-	4.6
Dielectric breakdown strength	kV	27	21	21	21	-
Incombustibility	GWI	>675°C	>675°C	>675°C	>650°C	>675°C