Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

Contact us

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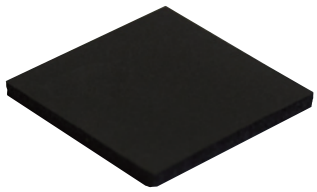
"Graphite-PAD" high thermal conductivity in z-direction

Type: **EYGT**



Graphite-PAD is a thermal interface material (TIM) that compatibly obtained excellent thermal conductivity in thickness direction (Z-axis direction) and high flexibility (deformable with a low load). The properties are greater than that of existing TIMs. The product is created by filling PGS Graphite Sheet into silicon resin.

Features

- High thermal conductivity : 13 W/m · K
- Excellent compressibility : 50 % (t=2 mm, Pressure 300 kPa)
- Thermal resistance: fit into uneven parts and provide excellent thermal resistance with a low load
- High reliability : correspond to −40 to 150 °C and maintains long-term reliability
- Thickness range : 0.5/1.0/1.5/2.0/2.5/3.0 mm
- RoHS compliant

Recommended applications

Cooling of heat generating components, such as electronic devices, semiconductor memory device, etc.

- General-purpose inverter, medical equipment, and DSC
- Car-mounted camera, motor control unit, automotive lighting (LED), car navigation, luminous source of laser HUD
- Base station, IGBT module

Explanation of Part Numbers

- Graphite-PAD (EYGT✻✻✻✻✻✻✻✻)

1	2	3	4	5	6	7	8	9	10	11	12
E	Y	G	T	3	5	3	5	A	2	0	A

Product Code
Graphite-PAD

Dimension	
3535	35 mm × 35 mm
7070	70 mm × 70 mm

Type	
A	Material code

Thickness of PAD	
30	3.0 mm
25	2.5 mm
20	2.0 mm
15	1.5 mm
10	1.0 mm
05	0.5 mm

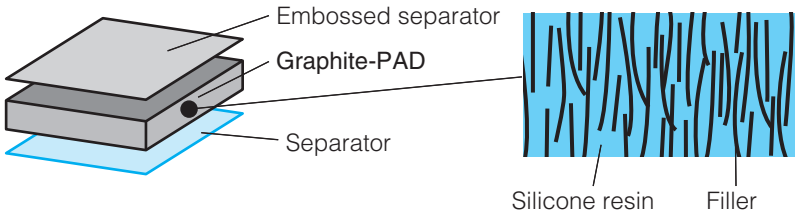
Ex. code

✻ Please confirm other condition separately.

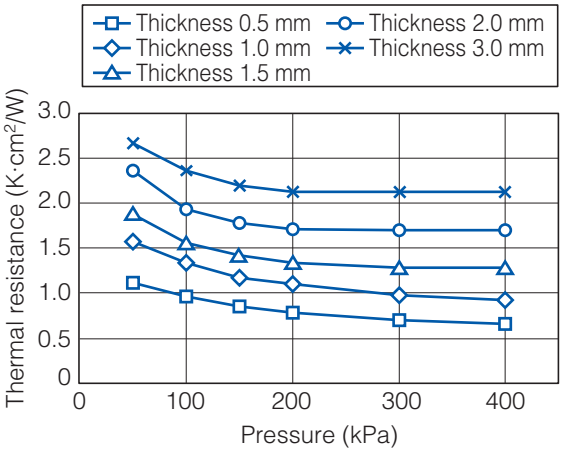
Typical characteristics

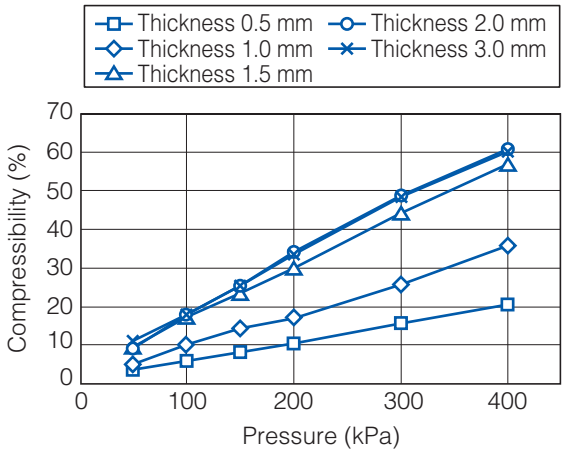
Items	Test equipment/method	Condition	Data					
Thickness (mm)			0.5	1.0	1.5	2.0	2.5	3.0
Thermal resistance (K·cm²/W)	TIM Tester	100 kPa	0.96	1.34	1.56	1.93	2.10	2.36
Compressibility (%)	TIM Tester	100 kPa (50 °C)	5.78	10.29	17.46	17.8	17.6	17.9
Thermal conductivity of Graphite-PAD with a unit (W/m·K) (including contact resistance)	TIM Tester	100 kPa	5.08	7.02	7.80	8.60	9.66	10.10
Thermal conductivity of the Graphite-PAD (W/m·K)	(ASTM D5470)	50 kPa	13					
Hardness	(ASTM D2240)	TYPE E	25					
Adhesive			Adhesive on both faces					
Volume resistivity (Ω·cm)	(ASTM D257)		4×10^5					
Operating temperature range (°C)			–40 to 150					
Siloxane		Σ (D4-D10)	≦ 70 ppm					

Structure

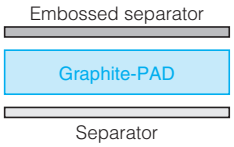


Thermal resistance and Compressibility





Composition example

Structure			
Operating temperature range		–40 °C to 150 °C	
Standard dimension		35 × 35 mm	70 × 70 mm
0.5 mm	Standard Part No.	EYGT3535A05A	EYGT7070A05A
	Thickness	0.5 mm	0.5 mm
1.0 mm	Standard Part No.	EYGT3535A10A	EYGT7070A10A
	Thickness	1.0 mm	1.0 mm
1.5 mm	Standard Part No.	EYGT3535A15A	EYGT7070A15A
	Thickness	1.5 mm	1.5 mm
2.0 mm	Standard Part No.	EYGT3535A20A	EYGT7070A20A
	Thickness	2.0 mm	2.0 mm
2.5 mm	Standard Part No.	EYGT3535A25A	EYGT7070A25A
	Thickness	2.5 mm	2.5 mm
3.0 mm	Standard Part No.	EYGT3535A30A	EYGT7070A30A
	Thickness	3.0 mm	3.0 mm

* Part numbers listed above are all standard samples for your consideration.
** Contact us for custom-made samples.
We can make samples in various forms and/or dimensions other than standard samples.