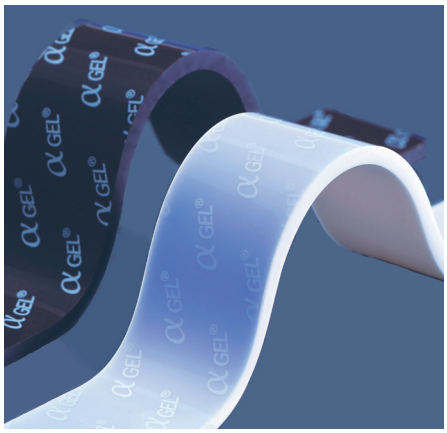
Sheet-Type (COH Line)



- αGEL's flexibility and high thermal conductivity of up to 20W / mK make for excellent heat dissipation capabilities.
- Adheres to rough surfaces and pushes out all air gaps.
- Provides good electrical insulation and is flame retardant.
- Low rebound and compressive stress.
- We offer customization according to your needs, e.g. with reinforcing material, non-adhesive sides, or adhesive characteristics. Shapes are also customizable.

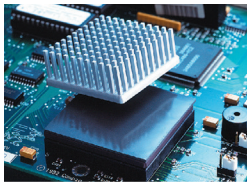
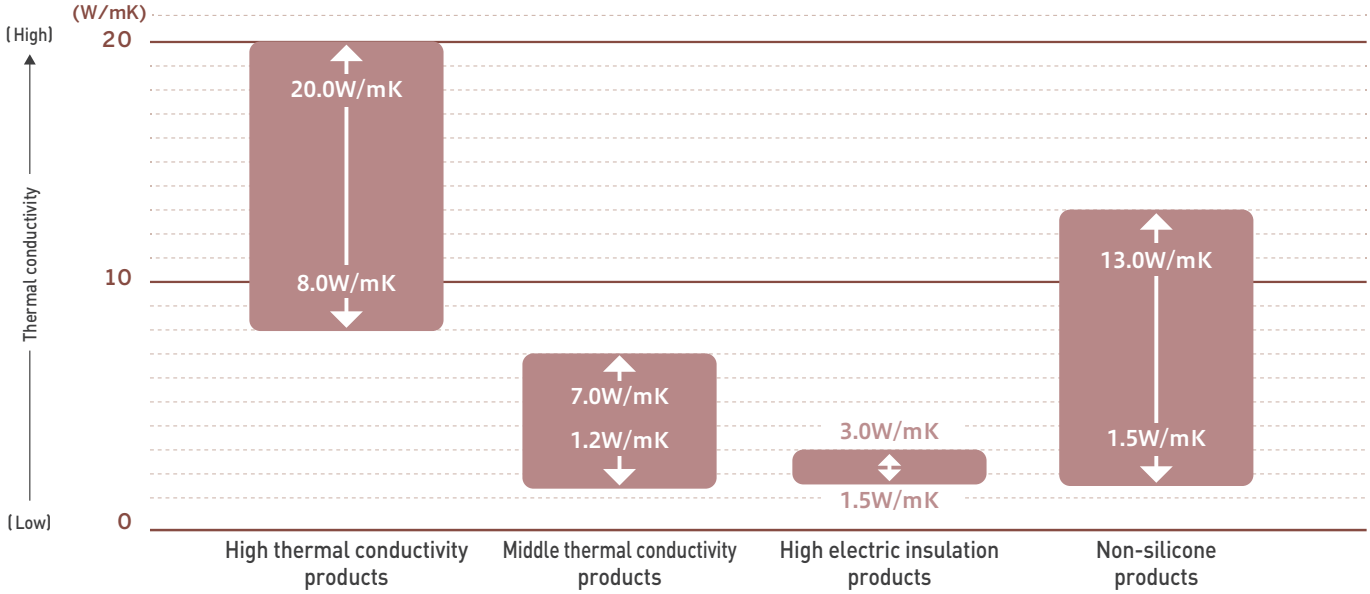
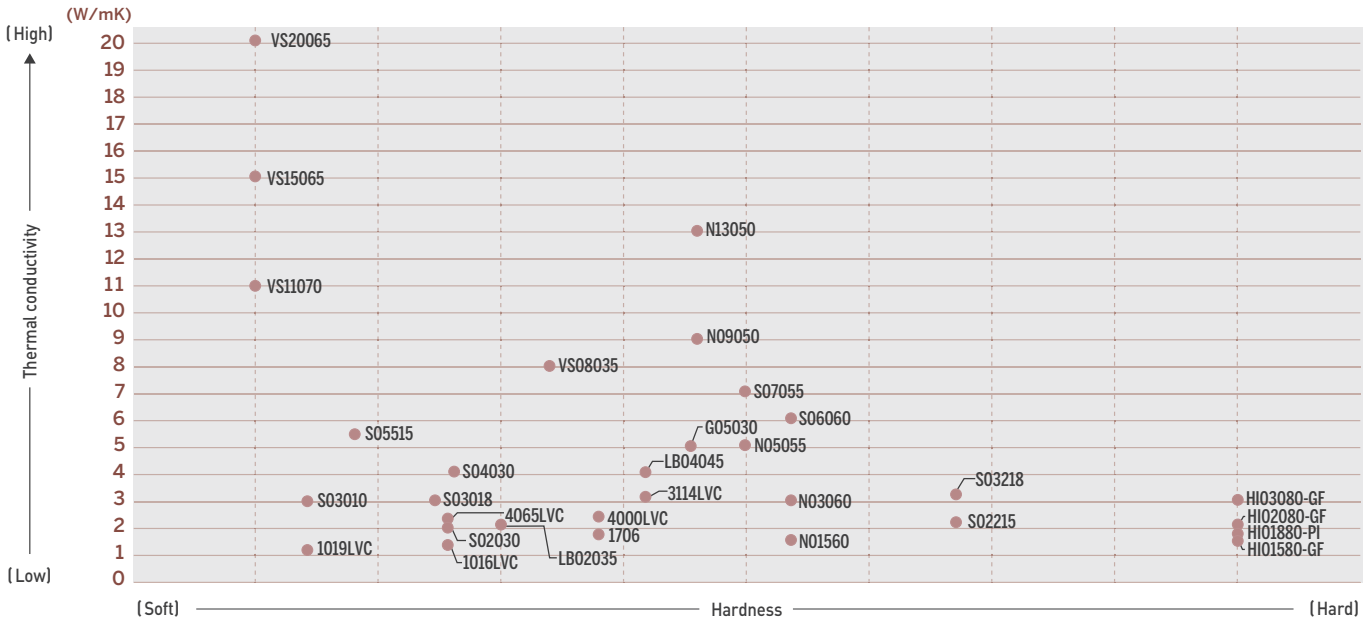


Table of thermal conductivity (By product)



Product lineup (By thermal conductivity / By hardness) (Sheet-Type)



【COH Line / High Thermal Conductivity Products Physical Characteristics】

Property	Unit	Product				Remarks
		COH-VS08035	COH-VS11070	COH-VS15065	COH-VS20065	
Thermal conductivity	W/mK	8.0	11.0	15.0	20.0	ASTM D5470
Hardness	Shore00	35	-	-	-	ASTM D2240
	Shore000	-	70	65	65	ASTM D2240
Thickness	mm	0.5~5.0	0.5~5.0	0.5~5.0	0.5~5.0	-
Temperature range	℃	-60～150	-60～150	-60～150	-60～150	-
Color	-	Purple	Gray Green	Purple	Brown	-
Material	-	Silicone	Silicone	Silicone	Silicone	-
Reinforced layer	-	-	-	-	-	-
Density	-	3.4	3.4	3.3	3.3	ASTM D792
Flame retardance	-	V-0 Equivalent	V-0 Equivalent	V-0 Equivalent	V-0 Equivalent	UL94
Dielectric breakdown strength	kV/mm	8	8	8	8	ASTM D149
Volume resistivity	Ω-m	$>10^{10}$	$>10^{10}$	$>10^{10}$	$>10^{10}$	ASTM D257
Surface resistivity	Ω	$>10^{11}$	$>10^{11}$	$>10^{11}$	$>10^{11}$	ASTM D257

【COH Line / Middle thermal conductivity-Type (GEL) Products Physical Characteristics】

Property	Unit	Product						Remarks
		COH-1016LVC	COH-1019LVC	COH-1706	COH-4000LVC	COH-4065LVC	COH-3114LVC	
Thermal conductivity	W/mK	1.3	1.2	-	2.3	2.2	3.1	ASTM D5470
		1.2	1.2	1.7	2.1	2.1	3.1	JIS R 2616 (Hot wire method)
Hardness	Asker C	-	-	27	-	-	40	JIS K 7312
	Needle penetration (1/10mm)	60	90	-	45	65	-	JIS K 2207
	Shore00	43	8	59	62	33	71	ASTM D2240
Thickness	mm	0.5～3.0	0.5～5.0	0.5～3.0	0.5～3.0	1.0～3.0	1.0～3.0	-
Temperature range	℃	-40～150	-40～150	-40～150	-40～150	-40～150	-40～150	-
Color	-	White	Blue	Gray	Gray	Reddish Brown	Gray	-
Material	-	Silicone	Silicone	Silicone	Silicone	Silicone	Silicone	-
Reinforced layer	-	-	-	-	-	-	-	-
Density	-	1.7	1.7	-	2.9	2.8	3	ASTM D792 JIS K 6249
Flame retardance	-	t0.5:V-1 >t1.0:V-0	t0.5:V-1 >t1.0:V-0	V-0	V-0	V-0	V-0	UL94
Dielectric breakdown strength	kV/mm	12	10	-	10	11	8	ASTM D149
Volume resistivity	Ω-m	$9.3*10^{11}$	$1.4*10^{12}$	-	$3.1*10^{12}$	$2.0*10^{11}$	$1.4*10^{10}$	ASTM D257
Surface resistivity	Ω	$1.7*10^{12}$	$2.1*10^{12}$	-	$3.2*10^{12}$	$4.2*10^{11}$	$8.0*10^{9}$	ASTM D257

※Silicone oil may bleed depending upon conditions. ※Low molecular siloxane is included in this product which basically composed of silicone. ※Above data are measured data, not guaranteed specifications.

【COH Line / Middle thermal conductivity-Type (GEL & Low Oil Bleed Type) Products Physical Characteristics】

Property	Unit	Product			Remarks
		COH-G05030	COH-LB02035	COH-LB04045	
Thermal conductivity	W/mK	-	2.0	4.0	ASTM D5470
		5.0	-	-	JIS R 2616 (Hot wire method)
Hardness	Asker C	30	-	-	JIS K 7312
	ShoreA	-	-	-	ASTM D2240
	ShoreOO	-	35	45	ASTM D2240
Thickness	mm	0.5	0.5～5.0	0.5～5.0	-
Temperature range	℃	-40～150	-60～180	-60～180	-
Color	-	Gray	Gray	Blue	-
Material	-	Silicone	Silicone	Silicone	-
Reinforced layer	-	-	-	-	-
Density	-	-	2.2	2.6	ASTM D792 JIS K 6249
Flame retardance	-	V-0 Equivalent	V-0 Equivalent	V-0 Equivalent	UL94
Dielectric breakdown strength	kV/mm	-	11	11	ASTM D149
Volume resistivity	Ω-m	-	$>10^{11}$	$>10^{11}$	ASTM D257
Surface resistivity	Ω	-	$>10^{10}$	$>10^{10}$	ASTM D257

【COH Line / Middle thermal conductivity-Type (Less than 3W/mK) Products Physical Characteristics】

Property	Unit	Product		Remarks
		COH-S02030	COH-S02215	
Thermal conductivity	W/mK	2.0	2.2	ASTM D5470
Hardness	ShoreA	-	15	ASTM D2240
	ShoreOO	30	-	ASTM D2240
Thickness	mm	0.5～5.0	0.3～5	-
Temperature range	℃	-60～180	-60～200	-
Color	-	White	Light Green	-
Material	-	Silicone	Silicone	-
Reinforced layer	-	-	-	-
Density	-	2.1	2.4	ASTM D792
Flame retardance	-	V-0 Equivalent	V-0 Equivalent	UL94
Dielectric breakdown strength	kV/mm	8	10	ASTM D149
Volume resistivity	Ω-m	$>10^{10}$	$>10^{11}$	ASTM D257
Surface resistivity	Ω	$>10^{10}$	$>10^{10}$	ASTM D257

【COH Line / Middle thermal conductivity-Type (Less than 5W/mK) Products Physical Characteristics】

Property	Unit	Product				Remarks
		COH-S03018	COH-S03010	COH-S03218	COH-S04030	
Thermal conductivity	W/mK	3.0	3.0	3.2	4.0	ASTM D5470
Hardness	ShoreA	-	-	18	-	ASTM D2240
	ShoreOO	18	10	-	30	ASTM D2240
Thickness	mm	0.5～5	0.5～5.0	0.5～5	0.5～5.0	-
Temperature range	℃	-60～180	-60～180	-60～200	-60～180	-
Color	-	Dark Gray	Gray	Brown	Blue	-
Material	-	Silicone	Silicone	Silicone	Silicone	-
Reinforced layer	-	-	-	-	-	-
Density	-	2.5	2.8	2.5	2.8	ASTM D792
Flame retardance	-	V-0 Equivalent	V-0 Equivalent	V-0 Equivalent	V-0 Equivalent	UL94
Dielectric breakdown strength	kV/mm	8	8	>12	8	ASTM D149
Volume resistivity	Ω-m	$>10^{11}$	$>10^{10}$	$>10^{11}$	$>10^{10}$	ASTM D257
Surface resistivity	Ω	$>10^{10}$	$>10^{11}$	$>10^{14}$	$>10^{10}$	ASTM D257

※Silicone oil may bleed depending upon conditions. ※Low molecular siloxane is included in this product which basically composed of silicone. ※Above data are measured data, not guaranteed specifications.

【COH Line / Middle thermal conductivity-Type (More than 5W/mK) Products Physical Characteristics】

Property	Unit				Remarks
		COH-S05515	COH-S06060	COH-S07055	
Thermal conductivity	W/mK	5.5	6.0	7.0	ASTM D5470
Hardness	ShoreA	-	-	-	ASTM D2240
	ShoreOO	15	60	55	ASTM D2240
Thickness	mm	0.5～5.0	0.5～5.0	0.5～5.0	-
Temperature range	℃	-60～180	-60～180	-60～180	-
Color	-	Gray	Red	Gray	-
Material	-	Silicone	Silicone	Silicone	-
Reinforced layer	-	-	-	-	-
Density	-	3.0	3.2	3.3	ASTM D792
Flame retardance	-	V-0 Equivalent	V-0 Equivalent	V-0 Equivalent	UL94
Dielectric breakdown strength	kV/mm	8	8	8	ASTM D149
Volume resistivity	Ω-m	$>10^{10}$	$>10^{10}$	$>10^{10}$	ASTM D257
Surface resistivity	Ω	$>10^{11}$	$>10^{11}$	$>10^{11}$	ASTM D257

【COH Line / High Electric Insulation Products Physical Characteristics】

Property	Unit	Product				Remarks
		COH-HI01580-GF	COH-HI01880-PI	COH-HI02080-GF	COH-HI03080-GF	
Thermal conductivity	W/mK	1.5	1.8	2.0	3.0	ASTM D5470
Hardness	ShoreA	80	80	80	80	ASTM D2240
Thickness	mm	0.23	0.15	0.3	0.35	-
Temperature range	℃	-60～180	-60～180	-60～180	-60～180	-
Color	-	Yellow	Gray	Green	Pink	-
Material	-	Silicone	Silicone	Silicone	Silicone	-
Reinforced layer	-	Glass Fiber	Polyimide	Glass Fiber	Glass Fiber	-
Density	-	2.3	1.5	2.6	2.8	ASTM D792
Flame retardance	-	V-0 Equivalent	V-0 Equivalent	V-0 Equivalent	V-0 Equivalent	UL94
Dielectric strength	kV	4	8	5	5.5	ASTM D149
Volume resistivity	Ω-m	$>10^{12}$	$>10^{12}$	$>10^{12}$	$>10^{10}$	ASTM D257
Surface resistivity	Ω	$>10^{12}$	$>10^{13}$	$>10^{12}$	$>10^{12}$	ASTM D257

【COH Line / Non-Silicone Type Products Physical Characteristics】

Property	Unit	Product					Remarks
		COH-N01560	COH-N03060	COH-N05055	COH-N09050	COH-N13050	
Thermal conductivity	W/mK	1.5	3.0	5.0	9.0	13.0	ASTM D5470
Hardness	ShoreOO	60	60	55	50	50	ASTM D2240
Thickness	mm	0.5～5.0	0.5～5.0	0.5～5.0	0.5～5.0	0.5～5.0	-
Temperature range	℃	-60～125	-60～125	-60～125	-60～125	-60～125	-
Color	-	Gray	Red	Gray	Pink	Gray	-
Material	-	Non-Silicone	Non-Silicone	Non-Silicone	Non-Silicone	Non-Silicone	-
Reinforced layer	-	-	-	-	-	-	-
Density	-	2.2	2.6	3.2	3.4	3.3	ASTM D792
Flame retardance	-	V-0 Equivalent	V-0 Equivalent	-	-	-	UL94
Dielectric breakdown strength	kV/mm	10	10	8	8	8	ASTM D149
Volume resistivity	Ω-m	$>10^{10}$	$>10^{10}$	$>10^{10}$	$>10^{10}$	$>10^{10}$	ASTM D257
Surface resistivity	Ω	$>10^{11}$	$>10^{11}$	$>10^{11}$	$>10^{11}$	$>10^{11}$	ASTM D257

※Silicone oil may bleed depending upon conditions. ※Low molecular siloxane is included in this product which basically composed of silicone. ※Above data are measured data, not guaranteed specifications.