

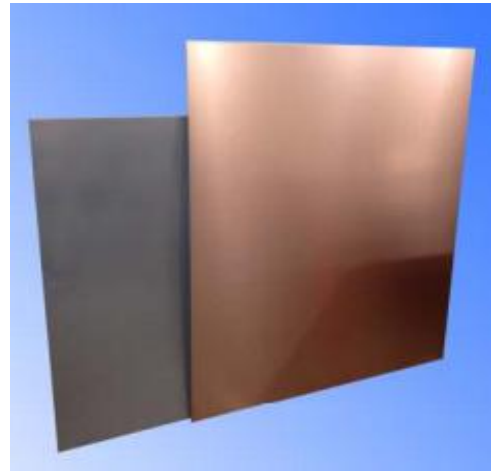
Product Specification of Guangzhou Aluminum

- **Main Products**

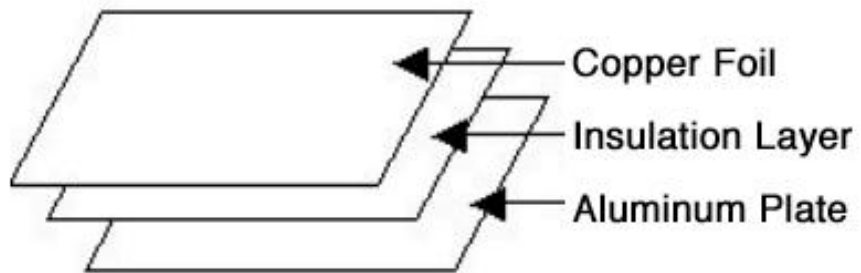
Aluminum Based Copper Clad Laminate

Substrate Type	
Substrate	aluminum, iron, copper, stainless steel, etc
Aluminum Model	1 series, 3series, 5series, etc
Aluminum Type	cold rolled, hot rolled
Aluminum Thickness (mm)	0.6, 0.7, 0.8, 0.9, 1.0, 1.1, 1.2, 1.3, 1.4, 1.5, 1.9, 2.0, etc
Anodising for aluminum	Yes, No
Copper Foil Thickness	18, 25, 35, 70, etc
Insulation Layer	film, etc
Protective Film	blue film, green film, ordinary film, high-temperature film, etc
Substrate Size	1000*1200

- **Product Images**



Aluminum PCB



- **Product Features**

- The high-quality, high-purity aluminum plate material of large enterprises is used. The purity of aluminum meets the standard of 99% and more. The aluminum-based high heat dissipation performance is fully utilized.
- The surface is silver and bright, adopting anodizing process.
- The hardness of the surface ensures that it is easy to control the circuit board forming burrs. High machining efficiency. High machining efficiency.
- The uniformity and vertical sizing process of the first-grade glass fiber cloth ensure the dimensional stability and flatness of the plate.
- The actual thickness of the copper foil fully meets the requirements of the national standard.

- **Application**

- **Ordinary Heat Conduction**

Home Lighting

- **Medium Heat Conduction**

Commercial Lighting; Automobile Tail Light

- **High Heat Conduction**

Street Light ; Display Backlight; Automobile Headlights

Product Specification

1W Thermal Conductivity Cold (Hot) Rolled Aluminum-based Copper Clad Laminate Series (LJ-B-AL1xxL (R) N--)

1	Product Nominal Thickness (mm)	0.8	1.0	1.2	1.5	1.6	2.0	$\pm 10\%$
2	Format Size (mm)	1200x1000						-1, +3
3	Aluminum Plate	Cold (Hot) Rolled Aluminum Plate	Model 1060H18	Thickness: product nominal thickness minus 0.12				$\pm 10\%$
		Vickers Hardness	≥ 7	Surface Finish	Anodic Oxidation (Film Thickness $\geq 2\mu\text{m}$)		Tensile Strength ≥ 125 Mpa	
4	Copper Foil	Electrolytic Copper	Thickness (um)	15	25	35	70	$\pm 10\%$
5	Insulation Layer	Film	Thermal Conductivity: 1W/m.K($\pm 15\%$)		Thickness (um) $100 \pm 10\%$		Heat-conducting Medium: Alumina	
6		Glass Transition Temperature (Tg)	110°C		Color: greyish white		Environment: halogen-free, sulfur-free	
7	Bow / Twist	Normal		$\leq 1\%$ Length				
8	Protective Film	Blue Film	Safe Baking Temperature $\leq 80^\circ\text{C}$		Green Film	Safe Baking Temperature $\leq 150^\circ\text{C}$		
9	Applications	Single Led lamp bead for lighting circuit aluminum-based PCB is no more than 1W: household lighting (light bar, bulb), street light, television backlight, etc.						

Performance Parameter

	Item	Unit	Index	Test GB/T4722-92	
10	Peel strength	kgf/cm	≥ 1.2	16.4	
11	Thermal Stress	S (288°C/10s)	Floating Solder	$A \geq 20$	17, no blister, no delamination
			Dip Soldering	$A \geq 20$	
12	Thermal conductivity	W/m-k	1.0		
13	Thermal Resistance	K.m ² /W	$\leq 1.0 \times 10^{-4}$		
14	Surface Resistivity	Ω	$\geq 10^{12}$		
15	Volume Resistivity	$\Omega \cdot \text{cm}$	$\geq 10^{12}$		
16	Dielectric Breakdown	AC kV	≥ 3.5	IPC TM-650 2.5.6	
17	CTI	V	$400 \leq \text{CTI} \leq 600$		
18	Flammability		V-0		
19	Environment		RoHS, SMDS, REACH, halogen-free, sulfur-free		

Product Specification

1W Thermal Conductivity 3 Series Cold (Hot) Rolled Aluminum-based Copper Clad Laminate Series (LJ-B-AL3xxL (R) N--)

1	Product Nominal Thickness (mm)	0.8	1.0	1.2	1.5	1.6	2.0	± 10%
2	Format Size (mm)	1200x1000						-1, +3
3	Aluminum Plate	Cold (Hot) Rolled Aluminum Plate	Model 3003H26	Thickness: product nominal thickness minus 0.12				± 10%
		Vickers Hardness	≥10	Surface Finish	Anodic Oxidation (Film Thickness ≥ 2um)		Tensile Strength ≥ 170 Mpa	
4	Copper Foil	Electrolytic Copper	Thickness (um)	15	25	35	70	± 10%
5	Insulation Layer	Film	Thermal Conductivity: 1W/m.K (± 15%)		Thickness (um) 100 ± 10%		Heat-conducting Medium: Alumina	
6		Glass Transition Temperature (Tg)	110°C		Color: greyish white		Environment: halogen-free, sulfur-free	
7	Bow / Twist	Normal		≤ 0.6% Length				
8	Protective Film	Blue Film	Safe Baking Temperature ≤ 80°C		Green Film	Safe Baking Temperature ≤ 150°C		
9	Applications	Single Led lamp bead for lighting circuit aluminum-based PCB is no more than 1W: household lighting (light bar, bulb), street light, television backlight, etc.						

Performance Parameter

	Item	Unit	Index		Test GB/T4722-92
10	Peel strength	kgf/cm	≥ 1.2		16.4
11	Thermal Stress	S (288°C/10s)	Floating Solder	$A \geq 20$	17, no blister, no delamination
			Dip Soldering	$A \geq 20$	
12	Thermal conductivity	W/m-k	1.0		
13	Thermal Resistance	K..m ² /W	$\leq 1.0 \times 10^{-4}$		
14	Surface Resistivity	Ω	$\geq 10^{12}$		
15	Volume Resistivity	$\Omega.cm$	$\geq 10^{12}$		
16	Dielectric Breakdown	AC kV	≥ 3.5		IPC TM-650 2.5.6
17	CTI	V	$400 \leq CTI \leq 600$		
18	Flammability		V-0		
19	Environment		RoHS, SMDS, REACH, halogen-free, sulfur-free		

Product Specification

1.5W Thermal Conductivity 1 Series Cold (Hot) Rolled Aluminum-based Copper Clad Laminate Series (LJ-B-AL1xxL (R) N--)

1	Product Nominal Thickness (mm)	0.8	1.0	1.2	1.5	1.6	2.0	$\pm 10\%$
2	Format Size (mm)	1200x1000						-1, +3
3	Aluminum Plate	Cold (Hot) Rolled Aluminum Plate	Model 1060H18	Thickness: product nominal thickness minus 0.12				$\pm 10\%$
		Vickers Hardness	≥ 7	Surface Finish	Anodic Oxidation (Film Thickness $\geq 2\mu\text{m}$)		Tensile Strength $\geq 125\text{ Mpa}$	
4	Copper Foil	Electrolytic Copper	Thickness (um)	15	25	35	70	$\pm 10\%$
5	Insulation Layer	Film	Thermal Conductivity: 1.5W/m.K ($\pm 15\%$)		Thickness (um): $100 \pm 10\%$		Heat-conducting Medium: Alumina	
6		Glass Transition Temperature (Tg)	110°C		Color: greyish white		Environment: halogen-free, sulfur-free	
7	Bow / Twist	Normal		$\leq 1\%$ Length				
8	Protective Film	Blue Film	Safe Baking Temperature $\leq 80^\circ\text{C}$		Green Film	Safe Baking Temperature $\leq 150^\circ\text{C}$		
9	Applications	Single Led lamp bead for lighting circuit aluminum-based PCB is no more than 1W: household lighting (light bar, bulb), street light, stage light, television backlight, etc.						

Performance Parameter

	Item	Unit	Index	Test GB/T4722-92	
10	Peel strength	kgf/cm	≥ 1.2	16.4	
11	Thermal Stress	S (288°C/10s)	Floating Solder	$A \geq 20$	17, no blister, no delamination
			Dip Soldering	$A \geq 20$	
12	Thermal conductivity	W/m-k	1.5		
13	Thermal Resistance	K.m ² /W	$\leq 0.7 \times 10^{-4}$		
14	Surface Resistivity	Ω	$\geq 10^{12}$		
15	Volume Resistivity	$\Omega.cm$	$\geq 10^{12}$		
16	Dielectric Breakdown	AC kV	≥ 3.5	IPC TM-650 2.5.6	
17	CTI	V	$400 \leq CTI \leq 600$		
18	Flammability		V-0		
19	Environment		RoHS, SMDS, REACH, halogen-free, sulfur-free		

Product Specification

1.5W Thermal Conductivity 3 Series Cold (Hot) Rolled Aluminum-based Copper Clad Laminate Series (LJ-B-AL3xxL (R) N--)

1	Product Nominal Thickness (mm)	0.8	1.0	1.2	1.5	1.6	2.0	$\pm 10\%$
2	Format Size (mm)	1200x1000						-1, +3
3	Aluminum Plate	Cold (Hot) Rolled Aluminum Plate	Model 3003H26	Thickness: product nominal thickness minus 0.12				$\pm 10\%$
		Vickers Hardness	≥ 10	Surface Finish	Anodic Oxidation (Film Thickness $\geq 2\mu\text{m}$)		Tensile Strength ≥ 170 Mpa	
4	Copper Foil	Electrolytic Copper	Thickness (um)	15	25	35	70	$\pm 10\%$
5	Insulation Layer	Film	Thermal Conductivity: 1.5W/m.K ($\pm 15\%$)		Thickness (um): $100 \pm 10\%$		Heat-conducting Medium: Alumina	
6		Glass Transition Temperature (Tg)	110°C		Color: greyish white		Environment: halogen-free, sulfur-free	
7	Bow / Twist	Normal		$\leq 0.6\%$ Length				
8	Protective Film	Blue Film	Safe Baking Temperature $\leq 80^\circ\text{C}$		Green Film	Safe Baking Temperature $\leq 150^\circ\text{C}$		
9	Applications	Single Led lamp bead for lighting circuit aluminum-based PCB is no more than 1W: household lighting (light bar, bulb), street light, stage light, television backlight, etc.						

Performance Parameter

	Item	Unit	Index		Test GB/T4722-92
10	Peel strength	kgf/cm	≥ 1.2		16.4
11	Thermal Stress	S (288°C/10s)	Floating Solder	$A \geq 20$	17, no blister, no delamination
			Dip Soldering	$A \geq 20$	
12	Thermal conductivity	W/m-k	1.5		
13	Thermal Resistance	K.m ² /W	$\leq 0.7 \times 10^{-4}$		
14	Surface Resistivity	Ω	$\geq 10^{12}$		
15	Volume Resistivity	$\Omega \cdot \text{cm}$	$\geq 10^{12}$		
16	Dielectric Breakdown	AC kV	≥ 3.5		IPC TM-650 2.5.6
17	CTI	V	$400 \leq \text{CTI} \leq 600$		
18	Flammability		V-0		
19	Environment		RoHS, SMDS, REACH, halogen-free, sulfur-free		

Product Specification

2 W Thermal Conductivity 3 Series Cold (Hot) Rolled Aluminum-based Copper Clad Laminate Series (LJ-B-AL3xxL (R) N--)

1	Product Nominal Thickness (mm)	0.8	1.0	1.2	1.5	1.6	2.0	$\pm 10\%$
2	Format Size (mm)	1200x1000						-1, +3
3	Aluminum Plate	Cold (Hot) Rolled Aluminum Plate	Model 3003H26	Thickness: product nominal thickness minus 0.12				$\pm 10\%$
		Vickers Hardness	≥ 10	Surface Finish	Anodic Oxidation (Film Thickness $\geq 2\mu\text{m}$)		Tensile Strength ≥ 170 Mpa	
4	Copper Foil	Electrolytic Copper	Thickness (um)	15	25	35	70	$\pm 10\%$
5	Insulation Layer	Film	Thermal Conductivity: 2 W/m.K($\pm 15\%$)		Thickness (um): $100 \pm 10\%$		Heat-conducting Medium: Alumina + Aluminium Nitride	
6		Glass Transition Temperature (Tg)	110°C		Color: gray		Environment: halogen-free, sulfur-free	
7	Bow / Twist	Normal		$\leq 0.6\%$ Length				
8	Protective Film	Blue Film	Safe Baking Temperature $\leq 80^\circ\text{C}$		Green Film	Safe Baking Temperature $\leq 150^\circ\text{C}$		
9	Applications	Single Led lamp bead for lighting circuit aluminum-based PCB is no more than 1W: household lighting (light bar, bulb), street light, stage light, television backlight, COB, etc.						

Performance Parameter

	Item	Unit	Index	Test GB/T4722-92	
10	Peel strength	kgf/cm	≥ 1.2	16.4	
11	Thermal Stress	S (288°C/10s)	Floating Solder	$A \geq 20$	17, no blister, no delamination
			Dip Soldering	$A \geq 20$	
12	Thermal conductivity	W/m-k	2.0		
13	Thermal Resistance	K.m ² /W	$\leq 0.55 \times 10^{-4}$		
14	Surface Resistivity	Ω	$\geq 10^{12}$		
15	Volume Resistivity	$\Omega.cm$	$\geq 10^{12}$		
16	Dielectric Breakdown	AC kV	≥ 3.5	IPC TM-650 2.5.6	
17	CTI	V	$400 \leq CTI \leq 600$		
18	Flammability		V-0		
19	Environment		RoHS, SMDS, REACH, halogen-free, sulfur-free		

Product Specification

2 W Thermal Conductivity 5 Series Cold (Hot) Rolled Aluminum-based Copper Clad Laminate Series (LJ-B-AL5xxL (R) N--)

1	Product Nominal Thickness (mm)	0.8	1.0	1.2	1.5	1.6	2.0	$\pm 10\%$
2	Format Size (mm)	1200x1000						-1, +3
3	Aluminum Plate	Cold (Hot) Rolled Aluminum Plate	Model 5052H32	Thickness: product nominal thickness minus 0.12				$\pm 10\%$
		Vickers Hardness	≥ 12	Surface Finish	Anodic Oxidation (Film Thickness $\geq 2\mu\text{m}$)		Tensile Strength $\geq 210\text{ Mpa}$	
4	Copper Foil	Electrolytic Copper	Thickness (um)	15	25	35	70	$\pm 10\%$
5	Insulation Layer	Film	Thermal Conductivity: 2 W/m.K($\pm 15\%$)		Thickness (um): $100 \pm 10\%$		Heat-conducting Medium: Alumina + Aluminium Nitride	
6		Glass Transition Temperature (Tg)	110°C		Color: gray		Environment: halogen-free, sulfur-free	
7	Bow / Twist	Normal		$\leq 0.5\%$ Length				
8	Protective Film	Blue Film	Safe Baking Temperature $\leq 80^\circ\text{C}$		Green Film	Safe Baking Temperature $\leq 150^\circ\text{C}$		
9	Applications	Single Led lamp bead for lighting circuit aluminum-based PCB is no more than 1W: household lighting (light bar, bulb), street light, stage light, television backlight, COB, etc.						

Performance Parameter

	Item	Unit	Index		Test GB/T4722-92
10	Peel strength	kgf/cm	≥ 1.2		16.4
11	Thermal Stress	S (288°C/10s)	Floating Solder	$A \geq 20$	17, no blister, no delamination
			Dip Soldering	$A \geq 20$	
12	Thermal conductivity	W/m-k	2.0		
13	Thermal Resistance	K.m ² /W	$\leq 0.55 \times 10^{-4}$		
14	Surface Resistivity	Ω	$\geq 10^{12}$		
15	Volume Resistivity	$\Omega \cdot \text{cm}$	$\geq 10^{12}$		
16	Dielectric Breakdown	AC kV	≥ 3.5		IPC TM-650 2.5.6
17	CTI	V	$400 \leq \text{CTI} \leq 600$		
18	Flammability		V-0		
19	Environment		RoHS, SMDS, REACH, halogen-free, sulfur-free		