



## GL12/GL22 Aluminum Based Copper-clad Laminate Sheet

### FEATURES

- Excellent Thermal Conductance
- Good Insulation
- Excellent Dimensional Stability
- Cost-effective
- GL12 Surface Anodic Oxidation Treatment CCL;  
GL22 Free Surface Anodic Oxidation Treatment CCL

### APPLICATIONS

- LED TV
- LED Lighting
- Power Amplifier、Switch、Auto-electrics
- I/O Amplifier、DC/AC Converter
- Rectifier、High Power Transistors

### GENERAL PROPERTIES

Item	Test Condition	Unit	Specification	Actual Value
Thermal Conductivity	A CPCA-4105-2010	W/m.k	$1.0 < \lambda \leq 1.5$	1.08
Heat Resistance	A CPCA-4105-2010	°C/W	$\leq 2.0 \times 10^{-4}$	$0.93 \times 10^{-4}$
Thermal Stress	Float IPC-TM-650 2.4.13.1	S	$288^\circ\text{C} \geq 120$	180
Peel Strength	A Float $288^\circ\text{C}/10\text{s}$ IPC-TM-650 2.4.8	LBS/IN	$\geq 6$	8.4-10.0
Dielectric Breakdown	AC	KV	$\geq 2$	3.0
TG	E2/105 DSC IPC-TM-650.2.4.25	°C	AABUS	125
Surface Resistivity	E24/125 IPC-TM-650 2.5.17.1	$\Omega$	$\geq 1.0 \times 10^4$	$2.0 \times 10^9$
Volume Resistivity	E24/125 IPC-TM-650 2.5.17.1	$\Omega\text{cm}$	$\geq 1.0 \times 10^6$	$2.0 \times 10^9$
Dielectric Constant	C40/23/50 IPC-TM-650.2.5.5.2	/	AABUS	1.84
Loss Tangent	Etched/@ 1MHZ IPC-TM-650 2.5.5.2	/	AABUS	0.014
Moisture Absorption	D24/23 IPC-TM-650 2.6.2.1	%	$\leq 1.5$	0.071
Flammability	UL94	/	FV-0	FV-0

#### Notes:

1. The Dielectric Breakdown value would meet the requirements according to the CPCA 4105-2010 C.8 AC standard.
2. Because of the impact of the flashover and creepage caused by lower creepage distance, the Dielectric Breakdown value of Al Base PCB will be down. The test should be performed under oil bath conditions.