



# CS-AL-88 AD5

## Specification of Aluminum Based Copper-clad Laminate

Item	Unit		Specification
Insulation thickness	μm	Max Min	200 60
Solder resistance (288 deg. C)	min.	Min	60
Thermal shock	288°C*10"/cycle		>6次
Peel strength Normal status	lb/in	Min	9
Breakdown Voltage	V/mil		750
Volume resistivity Normal status	>E+14	Ω cm	3.5x10 <sup>15</sup>
Surface resistivity Normal status	>E+12	Ω	4.7x10 <sup>16</sup>
Dielectric constant			5.8
1 MHz Normal status			5.7
1 GHz Normal status			
Dissipation Factor			0.015
1 MHz Normal status			0.008
1 GHz Normal status			
Water absorption	%		0.2
Thermal conductivity (measured on insulation layer only)	W/m°C		5.0
Flammability	94V0		Pass

## The thickness and dimension of Aluminum Based Copper-clad Laminate

Product category	CS-AL-88 AD5(The thickness of glue is 2~8mil)				
Dimension m/m	300x500~520 400x500~520 600x500~520 1200~1220x500~520 1200~1220x600~640				
The thickness of Single-Sided PCB with Aluminum Substrate	2.0 1/0	1.5 1/0	1.5 2/0	1.0 1/0	0.8 1/0
The thickness of Double-Sided PCB with Aluminum Substrate	2.0 1/1	1.5 H/H	1.5 1/1	1.0 1/1	0.8 1/1

- ❖ The above thicknesses exclude the thickness of glue and copper tinsel, and the thicknesses of copper tinsel and aluminum plate can be combined arbitrarily.  
The thickness of copper foil: H oz~5.0 oz.  
The thickness of aluminum plate: 0.2~5.0 m/m.
- ❖ This material is one kind of halogens-free green environmental kindly material.
- ❖ Compliance with the specification of RoHS

## The scope of application

- ❖ Lighting: LED outer-wall lighting, LED stage lighting, road LED lighting, domestic LED lighting.
- ❖ Electronic devices in automobile: igniting device, voltage regulator, auto safety control system, AC transformer.
- ❖ Power supply: Switch regulator, switch, DC-DC transformer, DC-AC transformer, large power, base board of solar cell.
- ❖ Electronic control: Relay, transistor base, switchboard, radiator, insulating heat conductive board in semiconductor, motor control device.
- ❖ Computer devices: Power supply device, soft disk driver, CPU.
- ❖ Communication electronic products: automobile telephone, high frequency booster of mobile telephone, filter circuit, transmitting circuit.

