

CCAF-05 Aluminum-base copper-clad laminate

The test base :

Thickness of the copper : 18um, 35um, 70um

Thickness of the dielectric : 80um (material of the high heat dissipation)

Thickness of the aluminum-base : 0.8, 1.0mm, 1.5mm, 2.0mm

The result of the test :

Item	Test item		Technology request	Unit	Test result
1	Peel Strength	A	≥ 1.0	N/mm	1.08
		After thermal stress (260°C)	≥ 1.0	N/mm	1.05
2	Blister test After Thermal stress (288°C, 2min)		288°C 2 min No delaminating	/	OK
3	thermal resistance		≤ 2.0	°C/W	0.45
4	Thermal Conductivity			W/m·k	2.2
5	Flammability(A)		FV-O	/	FV-O
6	Surface Resistivity	A	$\geq 1 \times 10^5$	MΩ	3.68×10^7
		Constant humidity treatment (90%, 35°C, 96h)	$\geq 1 \times 10^5$	MΩ	3.39×10^6
7	Volume Resistivity	A	$\geq 1 \times 10^6$	MΩ·m	4.2×10^8
		Constant humidity treatment (90%, 35°C, 96h)	$\geq 1 \times 10^6$	MΩ·m	3.17×10^6
8	Dielectric Breakdown		≥ 2	Kv	4.8
9	Dielectric constant (1MHz) (40°C, 93%, 96h)		≤ 4.4	/	4.24
10	Dielectric dissipation factor (1MHz) (40°C, 93%, 96h)		≤ 0.035	/	0.033