CCAF-04-A Aluminum-base copper-clad laminate

The company：changzhou chaoshun electronic technique Co.,ltd

The test base：CCAF-04-Athe high heat dissipation Aluminum-base copper-clad laminate

Thickness of the copper：35um

Thickness of the diclectric：80um（matrial of the high heat dissipation）

Thickness of the aluminum-base：1.5mm

The result of the test：

Item	Test item		Technology request	Unit	Test result
1	Peel Strength	A	≥1.8	N/mm	1.9
		After thermal stress（260℃）	≥1.8	N/mm	1.8
2	Blister test AfterThermal stress（288℃, 2min）		288℃ 2 min No delaminating	/	OK
3	thermal resistance		≤2.0	℃/W	0.65
4	Thermal Conductivity			W/m·k	1.5
5	Flammability(A)		FV-O	/	FV-O
6	Surface Resistivity	A	$\geq 1\times10^{5}$	MΩ	5.0×10^{7}
		Constant humidity treatment (90%,35℃,96h)	$\geq 1\times10^{5}$	MΩ	4.5×10^{6}
7	Volume Resistivity	A	$\geq 1\times10^{6}$	MΩ·m	1.0×10^{8}
		Constant humidity treatment (90%,35℃,96h)	$\geq 1\times10^{6}$	MΩ·m	1.9×10^{7}
8	Dielectric Breakdown		≥2	Kv	2.5
9	Dielectric constant（1MHz）（40℃, 93%, 96h）		≤4.4	/	4.2
10	Dielectric dissipation factor（1MHz）（40℃, 93%, 96h）		≤0.03	/	0.029
11	Accelerated aging experiment（125℃, 2000h）		The laminate bace should no wrinkles,no crack,no delaminating or no pine	/	OK
12	High low temperature impact test (-50℃, 15min, 80℃, 15minTOTAL DO 15～20 Circulation)	Peel Strength	/	N/mm	1.39～1.64
		Surface Resistivity	/	MΩ	1.9×10^{8}～6.4×10^{8}
13	Hot line expansion coefficient		/	Um/m℃	41.6