CFAF series

Description and Application

THE iron-based copper-clad laminate have excellent flam retardant, high mechanical strength, dimensional stability ect. It's completely designed and manufacture by our company, owns spectacular characteristic and functions, The material for the base is from special steel, silicon steel and ect. It has all the functions as metal material and the following particular characteristics:① High mechanic strength, good farther machinery suitable for the assembly heaven electronic parts on its surface; ②Vacancy area convenient for further machinery , procuring and fixing of the base;③Silicon-steel is iron magnetic, and can be applied on micro-motors such as on VTR,FDD.

Note: Chaoshun specializing in the productions of metal base copper-clad Laminates, product has been serialized. Thelron substrate type four: CFAF-01-R,CFAF-04-A,CFAF-05,CFAF-06.Iron substrate has 0.5mm,0.8mm,1.0mm;art models: silicon steel sheet, fingerprint resistant sheet; Copper foil thickness: 18um,35um,70um,105um,140um. Board size: 380mm×330mm, 600mm×500mm.

Test base:

Thickness copper: 35 um

Iron base: 0.5mm

Test result:

Test item		Company	CFAF-01	CFAF-04-A	CFAF-05	CFAF-06
			Test results	Test results	Test results	Test results
Peel Strength	Normal behavior A	N/mm	2.0	1.7	1.5	1.4
	After thermal stress		1.8	1.5	1.3	1.2
Blister test After Thermal stress		／	(260℃, 2min) No slice, No blister	(288℃, 2min) No slice, No blister	(288℃, 2min) No slice, No blister	(300℃, 2min) No slice, No Blister
Thermal resistance		℃/W	1.0	0.65	0.45	0.4
Thermal-conductive Factor		W/m·k	1.0	1.5	2.2	2.5
Flammability (A)		／	FV-0	FV-0	FV-0	FV-0
Surface Resistivity	Normal behavior A	MΩ	5×10^{7}	5×10^{7}	3.68×10^{7}	3.5×10^{7}
	Constant damp heat (25 degrees to 65 degrees c., RH:90%～98%, 20cycles after)		2×10^{6}	4.5×10^{6}	3.39×10^{6}	4.5×10^{6}
Volume Resistivity	Normal behavior A	MΩ·m	4×10^{8}	1.0×10^{8}	4.2×10^{8}	4.2×10^{8}
	Constant damp heat (25 degrees to 65 degrees c., RH:90%～98%, 20cycles after)		5×10^{7}	1.9×10^{7}	3.17×10^{7}	3.17×10^{7}
Breakdown voltage AC (5mA leakage current)		KV	6	4	6	6
Dielectric constant (1MHZ) (40℃, 93%, 96h)		／	4.2	4.2	4.24	4.2
Dielectric loss factor (1MHZ) (40℃, 93%, 96h)		／	0.02	0.02	0.033	0.033
CTI		V	230	600	600	600