

FR-4

FR-4 COPPER CLAD LAMINATE TEST REPORT

CUSTOMER		SIMAI		REPORT DATE		July 27, 2017	
TYPE		FR-4 RD140		GRADE		A	
SPECIFICATION		1.6mm-1/0-1092mmX1245mm-Yellow		Pallet NO.		P.0 NO	
QUANTITY		1000 sheets		RESIN TYPE		Normal TG	
LOT NO		A1143601062J; A1143602062J; A1143603062J; A1143604062J; A1143606062J					
Test item							
Test condition		Units		Standard value		Typical value	
1. Thickness		A		1.6 ±0.13		1.48-1.62	
2. 1/2 Peel strength, IBS/IN, minimum, 1/2 OZ As received After thermal stress		A A		≥8.0		12.5	
3. Volume resistivity, minimum E-24/125 At elevated temperature E-24/125		E-24/125		MQ.cm		≥10 ¹²	
4. Surface resistivity, minimum E-24/125 At elevated temperature E-24/125		E-24/125		MQ		≥10 ¹²	
5. Moisture absorption, maximum		E-1/105+des		%		≤0.50	
6. Dielectric breakdown, minimum		D-48/50 D-0.5/23		KV		≥40	
7. Flexural strength, minimum Length direction Cross direction		A A		Mpa		≥415 ≥345	
8. Arc resistance, minimum		D-48/50 D-0.5/23		S		≥60	
9. Flammability		A		S		UL-94V0	
10. Solderability		A		S		UL-94V0	
11. 1MHZ, Permittivity 1MHZ, maximum		A				≤5.4	
12. 1MHZ, Loss tangent 1MHZ, maximum		A				≤0.035	
13. Bow and twist, Max (%) double-side single-side		A A		%		≤1.5	
14. Thermal stress 288°C, 10sec (Min) Unetched Etched		A A				NO DEFECT	
15. Etchability		A				NO DEFECT	
16. Base appearance		A				NO DEFECT	
17. Tg (DSC, °C)		A		°C		≥140	
18. CTI, V		TEC-112		V		≥175	
19. TD °C		5% wt loss		°C		---	
20. T260, min		TMA		min		---	
INSPECTOR :							
Authorized :							

FINAL TESTING RESULT : ACC