



# AMC-832 HF Line- Up

Reported By : **AMC**



# AMC – 832 HF Typical Properties

Properties (屬性)	Condition	unit	AMC-832 HF
Resin color(顏色)	—	—	Black
Tg (玻璃轉移溫度)	DMA: $\geq 200$	°C	210
	TMA: $\geq 175$		185
CTE (熱膨脹係數 50~300°C)	x( $\alpha 1 / \alpha 2$ )	ppm/°C	13~15/16~18
	y( $\alpha 1 / \alpha 2$ )	ppm/°C	13~15/16~18
	z( $\alpha 1 / \alpha 2$ )	ppm/°C	15~35/125~165
Dielectric Constant (介電常數)	1GHz	—	4.5
Dissipation Factor (散逸係數)	1GHz	---	0.014
Peel strength(剝離強度)	12um	kg/cm	0.7~0.9
Moisture absorption(吸水率)	—	wt%	0.35~0.45
Flexural modulus(彎曲模量)	—	GPa	30~33
Young's modulus(楊氏模量)	—	GPa	22~30
Thermal Conductivity (導熱係數)	—	kcal/m, hr, °C	0.65~0.85
RoHS	—	—	0
Halogen free	—	—	0





# CCL Line-up: AMC – 832 HF

Nominal Thickness (mm)	COPPER FOIL(um)	PREPREG CONSTRUCTION (IPC)	Dk(1.0GHz)	Df(1.0GHz)	Product Stage
0.025	2,3,12	1017 x 1	4.4	0.015	Mass
0.03	2,3,12	1027 x 1	4.4	0.015	Mass
0.04	2,3,12	1037 x 1	4.4	0.015	Mass
0.05	2,3,12	1027 x 2	4.4	0.015	Mass
0.06	2,3,12	1037 x 2	4.4	0.015	Mass
0.1	2,3,12,18,35	1078 x 2	4.5	0.014	Mass
0.13	2,3,12,18,35	1078 x 2+1037 x 1	4.5	0.014	Mass
0.15	2,3,12,18,35	1078 x 3	4.5	0.014	Mass
0.2	2,3,12,18,35	1078 x 4	4.5	0.014	Mass
	2,3,12,18,35	3313 x 2	4.4	0.016	Mass
0.25	2,3,12,18,35	3313 x 2+1078 x 1	4.4	0.016	Mass
0.3	2,3,12,18,35	3313 x 3	4.4	0.016	Mass
0.4	2,3,12,18,35	3313 x 4	4.4	0.016	Mass
0.45	2,3,12,18,35	3313 x 4+1078 x 1	4.5	0.016	Mass
0.5	2,3,12,18,35	3313 x 5	4.4	0.016	Mass
0.6	2,3,12,18,35	3313 x 6	4.4	0.016	Mass
0.7	2,3,12,18,35	3313 x 7	4.4	0.016	Mass
0.8	2,3,12,18,35	3313 x 8	4.4	0.016	Mass
0.9	2,3,12,18,35	3313 x 9	4.4	0.016	Mass





# Prepreg Line-up: AMC-832B HF

Nominal Thickness*1 (mm)	G/C (IPC)	Resin Content (wt%)	Product Stage
0.025	1017	73 ± 2	Mass
0.030	1027	66 ± 2	Mass
0.040	1037	69 ± 2	Mass
0.045	1037	78 ± 2	Mass
0.050	1037	80 ± 2	Mass
0.100	3313	60 ± 2	Mass

※ After Cured Thickness data are our reference values and it is varied by inner core design.

Prepreg cured thickness were measured without copper, residual copper may consider 0%.





# *AMC-832B HF Press Cycle Suggestion*

## **Lamination cycle:**

The setting of lamination parameters such as temperature and pressure depend on the number of sheets being laminated. The optimal temperature and pressure need to be determined with the results of actual temperature ramp-up rate the condition of press flow.

### **a. Temperature setting**

- 1. Material heat ramp-up rate at 3 +/- 0.5 °C/min in the interval between 70 to 130°C.**
- 2. Temperature of hot platen at max of 225°C and material cure time longer than 85minutes at over 200°C.**
- 3. Cooling period at approximately 60 – 100 minutes, material temperature at 80°C or below.**

### **b. Pressure setting**

- 1. Kiss pressure of 100 psi, Full pressure of 450 ~650 psi.**
- 2. Material temperature 40~80°C at max pressure**

### **c. Vacuum setting**

**Vacuum 50 torr or below.**

