



SM-730-4 Laminate

(IPC-4101/21)

尚茂電子材料股份有限公司

ShineMore Technology Materials Co.

Website: <http://www.shinemore.com.tw>

ANSI: FR-4.0

UL FILE: E199230

Version D

Updated: 01/26/2017

General Specification:

Thickness		Copper Cladding		Standard Size		Special Size (on Request)	
<u>inch</u>	<u>(mm)</u>	<u>oz</u>	<u>(µm)</u>	<u>inch</u>	<u>(mm)</u>	<u>inch</u>	<u>(mm)</u>
0.003	(0.08)	3/8	(12)	36.8 x 48.8	(935 x 1240)	37.0 x 49.0	(941 x 1246)
to		to		40.8 x 48.8	(1035 x 1240)	41.0 x 49.0	(1043 x 1246)
0.125	(3.14)	12	(410)	42.8 x 48.8	(1085 x 1240)	43.0 x 49.0	(1093 x 1246)

Characteristics:

- Multi-functional Epoxy
- E-woven Glass
- HTE Copper Foil

Features:

- UV Blocking and AOI Performance
- Excellent dimensional stability and thickness uniformity
- Good thermal and chemical resistance
- Stable electrical and mechanical properties
- Tg ≥ 135°C (by DSC)

Applications:

- Computer & Peripheral (1C)
- Communications Telecom (2C)
- Consumer Electronics (3C)
- Instrumentation / Industry PC/ Medical
- OA Equipment / Printer etc

Remarks: **Not recommended for Lead-free process**

	Test Items	Units Metric (English)	Test Condition	IPC Spec.	Typical Value	Test Method (IPC-TM-650)
Electrical	Dielectric Constant (1MHz)	---	C-96/23/50	< 5.4	4.5 - 4.7	2.5.5.2
	Loss Tangent (1MHz)	---	C-96/23/50	< 0.035	0.018 - 0.025	2.5.5.2
	Volume Resistivity	MΩ -cm	C-96/23/50	> 10 ⁶	> 10 ⁷	2.5.17.1
	Surface Resistivity	MΩ	C-96/23/50	> 10 ⁴	> 10 ⁶	2.5.17.1
Physical	Warp & Twist	%	—	< 1.0	< 0.5	2.4.4
	Moisture absorption	%	E-24/50+d-24/23	< 0.8	< 0.15	2.6.2.1
	Peel strength	N/mm (lb/in)	As Received	0.7 (4.0)	1.75 – 2.10 (10 – 12)	2.4.8
			After Solder	0.7 (4.0)	1.40 -1.75 (8 – 10)	2.4.8
Thermal	Glass Transition Temp	°C	DSC	> 110	>135	2.4.25
			TMA	--	≥ 125	2.4.24
	CTE (Z axis)	ppm/°C	> Tg	—	<300	2.4.24
	Thermal stress	sec	288°C Solder dipping	> 10	> 60	2.4.13.1
	Flammability	---	A & E-24/125	min. V-0	V-0	UL 94

※ Specification Sheet : IPC-4101/21

● **Ordering Information :**

◎ Phone : +886-3-386-4289

◎ Email : sales@shinemo.com.tw

NOTE:

1. Typical Values are for information purpose only.
2. Any sale of these products will be governed by the terms and conditions of the agreement under which they are sold.