

SM630-4(CTI600)

SM-630-4 Laminate

UL FILE : E199230

(IPC-4101C/ 97)

updated : A Version 03/07/2011

General Specification:

Thickness		Copper Cladding		Standard Size		Special large (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:

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

Features:

- High CTI value
- UV Blocking and AOI Performance
- Excellent dimensional stability and thickness uniformity
- Superior thermal and chemical resistance
- IPC-4101A specification is applicable
- $T_g \geq 130 \pm 5^\circ\text{C}$ (DSC)

Applications:

- Computer & Peripheral
- Communications Telecom
- Consumer Electronics
- Instrumentation / Industry / Medical
- OA Equipment / printer etc

Remarks : Not recommended for Lead-free process.

SM630-4 Laminate Properties:

Based on 1.6 mm^t, 1/1

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	4.4 - 4.8	2.5.5
	Dissipation Factor	---	C-96/23/50	< 0.035	0.013 - 0.023	2.5.5
	Volume Resistivity	MΩ -cm	C-96/23/50	> 10 ⁶	> 10 ¹⁰	2.5.17.1
	Surface Resistivity	MΩ	C-96/23/50	> 10 ⁴	> 10 ⁵	2.5.17.1
Physical	Flexural Strength	Lb/In	As Received	< 6x10 ⁴	8 - 6x10 ⁴	2.4.4
	Moisture absorption	%	E-24/50+d-24/2	< 0.8	< 0.2	2.6.2.1
	Peel strength	N / mm (1b/in)	As Received	0.7 (4.0)	1.40 -1.75 (8 – 10)	2.4.8
			After Solder	0.7 (4.0)	1.05 -1.40 (6 – 8)	2.4.8
Thermal	Glass Transition Temp	°C	DSC	By DSC > 125	130+/-5	2.4.25
			TMA		125+/-5	2.4.24
	CTI	V	C-96/20/65	>600	>600	2.4.24
	Thermal stress	sec	288°C Solder	> 10	> 60	2.4.13.1
	Flammability	---	A	UL 94 V-0	min.V-0	UL 94 V-0

※ Specification Sheet : IPC-4101C/97