

# KB-6160/6160A/6160C (ANSI: FR-4)

#### Features

- UVB and AOI (automatic optical inspection) compatible, so as to increase productivity and accuracy.
- Excellent heat resistance and mechanical

### Properties

• IPC-4101C/21 specification is applicable

### **General Properties**

Test Item	Unit	Test Method (IPC-TM-650)	Test Condition	Specification (IPC-4101C)	Typical Value
Peel Strength (1 oz.)	N/mm	2.4.8	125℃	≥0.70	1.70
	IN/IIIIII		Float 288°C / 10 Sec	≥1.05	1.75
Thermal Stress	Sec	2.4.13.1	Float288 °C/unetched	≥10	180
Bow / Twist	%	2.4.22.1	A	≤ 1.0	0.17 / 0.35
Flexural Strength	2	2.4.4	Warp	≥415	565
	N/mm <sup>2</sup>		Fill	≥345	416
Flammability	Rating	UL94	UL94	UL94 V-0	V-0
Glass Transition (Tg)	$^{\circ}$	2.4.25	E-2/105 DSC	≥130	135
Surface Resistivity	ΜΩ	2.5.17.1	C-96/35/90	$\geqslant$ 1.0×10 <sup>4</sup>	1.0×10 <sup>6</sup>
Volume Resistivity	MΩ-cm	2.5.17.1	C-96/35/90	$\geq 1.0 \times 10^6$	1.0×10 <sup>8</sup>
Dielectric Constant	_	2.5.5.2	Etched/@1 MHZ	≤5.4	4.58
Loss Tangent	_	2.5.5.2	Etched/@1 MHZ	≤0.035	0.022
Arc Resistance	Sec	2.5.1	D-48/50+D-0.5/23	≥60	125
Moisture Absorption	%	2.6.2.1	D-24/23	≤0.35(min0.51mm)	0.21
				≤0.80(max0.51mm)	0.19
Z-Axis Expansion	ppm/°C	2.4.24	E-2/105 TMA	_	58/286
TD	$^{\circ}\mathbb{C}$	2.4.24.6	TGA		305
T-260	min	2.4.24.1	TMA		10

Remarks: Typical values for reference only Specimen Thickness: 1.6 mm 1/1

A = Keep the specimen originally without any process

C = Temperature and humidity conditioning

D = Temperature conditioning immersion in distilled water.

E = Immersing in distilled water with temperature control

Website: http://www.kblaminates.com

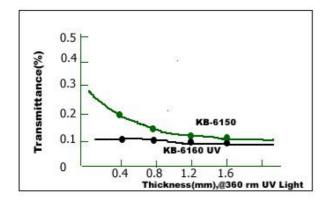
Version: 2.1



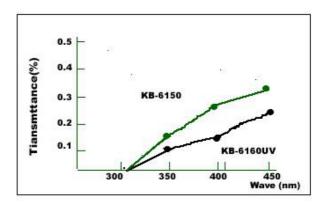
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### Speciality Chart

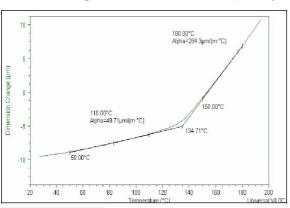
UV blocking (thickness) UV



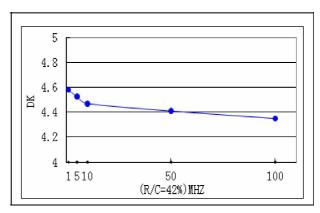
UV blocking (wave / UV-3100)



Thermal expansion of Z-direction (test by TMA)



Dielectric constant



### **Applications**

• Computer, communication equipment, instrument, OA equipment, etc.

## **Purchasing Information**

Base Color	Thickness	Copper Cladding	Regular Size (mm)	CTI Value
yellow	0.05mm ~ 3.5mm	12μm , 18μm 35μm, 70μm 105μm	915*1220mm (36"*48") 1020*1220mm (40"*48") 1067*1220mm (42"*48")	KB-6160:150V KB-6160A:175V KB-6160C: 300V/600V

Note: 1) Other sheet size and thickness could be available upon request.

2) Speciality chart for reference only.



3) Version updates without notice.

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