



技術創新、團隊成長、品質卓越、顧客滿意

## 產品規格書

產品名稱: 覆蓋膜(CL)

單面電解銅箔(ED)

單面壓延銅箔(RA)

雙面電解銅箔(ED)

雙面電解銅箔(RA)

單面聚脂覆銅板(PET)

補強板(FR)

純膠(BS)

無膠銅箔(2L)

台虹科技				
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台虹科技股份有限公司

一.Coverlay 產品規格:

1.1 規格表: Table 1

Test Items	Condition of Treatment	FD0515HL	Test method
Peel strength	A	$\geq 0.5\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/10sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1	$\geq 1.0 \times 10^{10} \Omega$	ASTM D-257
Volume Resistivity	C1	$\geq 1.0 \times 10^{12} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	-----	No evident of defects	IPC-TM-650 NO.2.3.2
Flammability	-----	V-0	UL-94
Adhesive Flow		$\leq 0.2\text{mm}$	IPC-TM-650 NO.2.3.17
Dimensional Stability	MD	A	IPC-TM-650 NO.2.2.4
	TD		
Insulation Resistance	C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	<10°C	3 month	

1.2 規格表: Table 2

Test Items	Condition of Treatment	FD0525HL	Test method
Peel strength	A	$\geq 0.5\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/10sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1	$\geq 1.0 \times 10^{10} \Omega$	ASTM D-257
Volume Resistivity	C1	$\geq 1.0 \times 10^{12} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	-----	No evident of defects	IPC-TM-650 NO.2.3.2
Flammability	-----	V-0	UL-94
Adhesive Flow		$\leq 0.2\text{mm}$	IPC-TM-650 NO.2.3.17
Dimensional Stability	A	$\leq \pm 0.2\%$	IPC-TM-650 NO.2.2.4
Insulation Resistance	C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	<10°C	3 month	

1.3 規格表: Table 3

Test Items	Condition of Treatment	FD1025HL	Test method
Peel strength	A	$\geq 0.5\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/10sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1	$\geq 1.0 \times 10^{10} \Omega$	ASTM D-257
Volume Resistivity	C1	$\geq 1.0 \times 10^{12} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	-----	No evident of defects	IPC-TM-650 NO.2.3.2
Flammability	-----	V-0	UL-94
Adhesive Flow		$\leq 0.2\text{mm}$	IPC-TM-650 NO.2.3.17
Dimensional Stability	A	$\leq \pm 0.2\%$	IPC-TM-650 NO.2.2.4
Insulation Resistance	C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	<10°C	3 month	

1.4 規格表: Table 4

Test Items	Condition of Treatment	FD1025PL	Test method
Peel strength	A	$\geq 0.5\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/10sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1	$\geq 1.0 \times 10^{10} \Omega$	ASTM D-257
Volume Resistivity	C1	$\geq 1.0 \times 10^{12} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	-----	No evident of defects	IPC-TM-650 NO.2.3.2
Adhesive Flow		$\leq 0.2\text{mm}$	IPC-TM-650 NO.2.3.17
Dimensional Stability	MD	A	$\leq \pm 0.2\%$
	TD		
Insulation Resistance	C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	<10°C	3 month	

1.5 規格表: Table 5

Test Items	Condition of Treatment	FD1035HL	Test method
Peel strength	A	$\geq 0.5\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/10sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1	$\geq 1.0 \times 10^{10} \Omega$	ASTM D-257
Volume Resistivity	C1	$\geq 1.0 \times 10^{12} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	-----	No evident of defects	IPC-TM-650 NO.2.3.2
Flammability	-----	V-0	UL-94
Adhesive Flow		$\leq 0.2\text{mm}$	IPC-TM-650 NO.2.3.17
Dimensional Stability	MD	A	$\leq \pm 0.2\%$
	TD		
Insulation Resistance	C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	<10°C	3 month	

## 二.FCCL 產品規格:

### 2.1 規格表: Table 6

Test Items	Condition of Treatment	XSIE101020HME	Test method
Peel strength	A	$\geq 1.2\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1	$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity	C1	$\geq 1.0 \times 10^{15} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	---	No evident of defects	IPC-TM-650 NO.2.3.2
Flammability	---	V-0	UL-94
Dimensional Stability	A	$\leq \pm 0.2\%$	IPC-TM-650 NO.2.2.4
MD			
TD			
Dielectric dissipation Factor	C1	0.040	IPC-TM-650 NO.2.5.5.3
Dielectric constant	C1	4.0	IPC-TM-650 NO.2.5.5.3
Insulation Resistance	C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	---	12 month	25°C 65%

2.2 規格表: Table 7

Test Items	Condition of Treatment	XSIE101020HLC	Test method
Peel strength	A	$\geq 1.2\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1	$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity	C1	$\geq 1.0 \times 10^{15} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	---	No evident of defects	IPC-TM-650 NO.2.3.2
Flammability	---	V-0	UL-94
Dimensional Stability	MD	A	$\leq \pm 0.2\%$
	TD		
Dielectric dissipation Factor	C1	0.040	IPC-TM-650 NO.2.5.5.3
Dielectric constant	C1	4.0	IPC-TM-650 NO.2.5.5.3
Insulation Resistance	C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	---	12 month	25°C 65%



2.3 規格表: Table 8

Test Items	Condition of Treatment	XSIE101020PLC	Test method
Peel strength	A	$\geq 1.0\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1	$\geq 1.0 \times 10^{12} \Omega$	ASTM D-257
Volume Resistivity	C1	$\geq 1.0 \times 10^{14} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	---	No evident of defects	IPC-TM-650 NO.2.3.2
Dimensional Stability	MD	A	$\leq \pm 0.2\%$
	TD		
Insulation Resistance	C1	$\geq 1.0 \times 10^{10} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	---	12 month	25°C 65%

2.4 規格表: Table 9

Test Items	Condition of Treatment	XSIE100520HME	Test method
Peel strength	A	$\geq 1.0\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1	$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity	C1	$\geq 1.0 \times 10^{15} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	---	No evident of defects	IPC-TM-650 NO.2.3.2
Flammability	---	V-0	UL-94
Dimensional Stability	A	$\leq \pm 0.2\%$	IPC-TM-650 NO.2.2.4
			TD
Dielectric dissipation Factor	C1	0.040	IPC-TM-650 NO.2.5.5.3
Dielectric constant	C1	4.0	IPC-TM-650 NO.2.5.5.3
Insulation Resistance	C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	---	12 month	25°C 65%

2.5 規格表: Table 10

Test Items	Condition of Treatment	XSIE050513HME	Test method
Peel strength	A	$\geq 0.5\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1	$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity	C1	$\geq 1.0 \times 10^{15} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	---	No evident of defects	IPC-TM-650 NO.2.3.2
Flammability	---	V-0	UL-94
Dimensional Stability	MD	A	$\leq \pm 0.2\%$
	TD		
Dielectric dissipation Factor	C1	0.040	IPC-TM-650 NO.2.5.5.3
Dielectric constant	C1	4.0	IPC-TM-650 NO.2.5.5.3
Insulation Resistance	C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	---	12 month	25°C 65%

2.6 規格表: Table 11

Test Items	Condition of Treatment	XSIE201020HLC	Test method
Peel strength	A	$\geq 1.2\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1	$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity	C1	$\geq 1.0 \times 10^{15} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	---	No evident of defects	IPC-TM-650 NO.2.3.2
Dimensional Stability	MD	A	$\leq \pm 0.2\%$
	TD		
Insulation Resistance	C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	---	12 month	25°C 65%

2.7 規格表: Table 12

Test Items	Condition of Treatment		XSIR050513HJY	Test method
Peel strength	A		$\geq 0.5\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1		300°C/30sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1		$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity	C1		$\geq 1.0 \times 10^{15} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	---		No evident of defects	IPC-TM-650 NO.2.3.2
Flammability	---		V-0	UL-94
Dimensional Stability	MD	A	$\leq \pm 0.2\%$	IPC-TM-650 NO.2.2.4
	TD			
Dielectric dissipation Factor	C1		0.040	IPC-TM-650 NO.2.5.5.3
Dielectric constant	C1		4.0	IPC-TM-650 NO.2.5.5.3
Insulation Resistance	C1		$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	---		12 month	25°C 65%
Flexural endurance (without CL)	A	MD	$\geq 500$	JIS C 6471
		TD	$\geq 500$	0.5Kg,0.8R

2.8 規格表: Table 13

Test Items	Condition of Treatment		XSIR101020HOC	Test method
Peel strength	A		$\geq 1.2\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1		300°C/30sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1		$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity	C1		$\geq 1.0 \times 10^{15} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	---		No evident of defects	IPC-TM-650 NO.2.3.2
Flammability	---		V-0	UL-94
Dimensional Stability	MD	A	$\leq \pm 0.2\%$	IPC-TM-650 NO.2.2.4
	TD			
Dielectric dissipation Factor	C1		0.040	IPC-TM-650 NO.2.5.5.3
Dielectric constant	C1		4.0	IPC-TM-650 NO.2.5.5.3
Insulation Resistance	C1		$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	---		12 month	25°C 65%
Flexural endurance (without CL)	A	MD	$\geq 200$	JIS C 6471
		TD	$\geq 200$	0.5Kg,0.8R

2.9 規格表: Table 14

Test Items	Condition of Treatment		XSIR100520HJY	Test method
Peel strength	A		$\geq 1.0\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1		300°C/30sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1		$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity	C1		$\geq 1.0 \times 10^{15} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	---		No evident of defects	IPC-TM-650 NO.2.3.2
Flammability	---		V-0	UL-94
Dimensional Stability	MD	A	$\leq \pm 0.2\%$	IPC-TM-650 NO.2.2.4
	TD			
Dielectric dissipation Factor	C1		0.040	IPC-TM-650 NO.2.5.5.3
Dielectric constant	C1		4.0	IPC-TM-650 NO.2.5.5.3
Insulation Resistance	C1		$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	---		12 month	25°C 65%
Flexural endurance (without CL)	A	MD	$\geq 150$	JIS C 6471
		TD	$\geq 150$	0.5Kg,0.8R

2.10 規格表: Table 15

Test Items	Condition of Treatment	XSIR201020AOC	Test method
Peel strength	A	$\geq 1.2\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1	$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity	C1	$\geq 1.0 \times 10^{15} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	---	No evident of defects	IPC-TM-650 NO.2.3.2
Dimensional Stability	MD	A	$\leq \pm 0.2\%$
	TD		
Insulation Resistance	C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	---	12 month	25°C 65%



2.11 規格表: Table 16

Test Items		Condition of Treatment	NDIE101020HME	Test method
Peel strength		A	$\geq 1.2\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance		S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Surface Resistivity		C1	$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity		C1	$\geq 1.0 \times 10^{15} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity		---	No evident of defects	IPC-TM-650 NO.2.3.2
Flammability		---	V-0	UL-94
Dimensional Stability	MD	A	$\leq \pm 0.2\%$	IPC-TM-650 NO.2.2.4
	TD			
Dielectric dissipation Factor		C1	0.040	IPC-TM-650 NO.2.5.5.3
Dielectric constant		C1	4.0	IPC-TM-650 NO.2.5.5.3
Insulation Resistance		C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life		---	12 month	25°C 65%

2.12 規格表: Table 17

Test Items		Condition of Treatment	NDIE100513HME	Test method
Peel strength		A	$\geq 1.0\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance		S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Surface Resistivity		C1	$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity		C1	$\geq 1.0 \times 10^{15} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity		---	No evident of defects	IPC-TM-650 NO.2.3.2
Flammability		---	V-0	UL-94
Dimensional Stability	MD	A	$\leq \pm 0.2\%$	IPC-TM-650 NO.2.2.4
	TD			
Dielectric dissipation Factor		C1	0.040	IPC-TM-650 NO.2.5.5.3
Dielectric constant		C1	4.0	IPC-TM-650 NO.2.5.5.3
Insulation Resistance		C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life		---	12 month	25°C 65%

2.13 規格表: Table 18

Test Items		Condition of Treatment	NDIE200520HME	Test method
Peel strength		A	$\geq 0.5\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance		S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Surface Resistivity		C1	$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity		C1	$\geq 1.0 \times 10^{15} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity		---	No evident of defects	IPC-TM-650 NO.2.3.2
Flammability		---	V-0	UL-94
Dimensional Stability	MD	A	$\leq \pm 0.2\%$	IPC-TM-650 NO.2.2.4
	TD			
Dielectric dissipation Factor		C1	0.040	IPC-TM-650 NO.2.5.5.3
Dielectric constant		C1	4.0	IPC-TM-650 NO.2.5.5.3
Insulation Resistance		C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life		---	12 month	25°C 65%

2.14 規格表: Table 19

Test Items		Condition of Treatment	NDIR050513HJY	Test method
Peel strength		A	$\geq 0.5\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance		S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Surface Resistivity		C1	$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity		C1	$\geq 1.0 \times 10^{15} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity		---	No evident of defects	IPC-TM-650 NO.2.3.2
Flammability		---	V-0	UL-94
Dimensional Stability	MD	A	$\leq \pm 0.2\%$	IPC-TM-650 NO.2.2.4
	TD			
Dielectric dissipation Factor		C1	0.040	IPC-TM-650 NO.2.5.5.3
Dielectric constant		C1	4.0	IPC-TM-650 NO.2.5.5.3
Insulation Resistance		C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life		---	12 month	25°C 65%

2.15 規格表: Table 20

Test Items		Condition of Treatment	NDIR100520HJY	Test method
Peel strength		A	$\geq 1.0\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance		S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Surface Resistivity		C1	$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity		C1	$\geq 1.0 \times 10^{15} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity		---	No evident of defects	IPC-TM-650 NO.2.3.2
Flammability		---	V-0	UL-94
Dimensional Stability	MD	A	$\leq \pm 0.2\%$	IPC-TM-650 NO.2.2.4
	TD			
Dielectric dissipation Factor		C1	0.040	IPC-TM-650 NO.2.5.5.3
Dielectric constant		C1	4.0	IPC-TM-650 NO.2.5.5.3
Insulation Resistance		C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life		---	12 month	25°C 65%

2.16 規格表: Table 21

Test Items		Condition of Treatment	NDIR101020HOC	Test method
Peel strength		A	$\geq 1.2\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance		S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Surface Resistivity		C1	$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity		C1	$\geq 1.0 \times 10^{15} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity		---	No evident of defects	IPC-TM-650 NO.2.3.2
Flammability		---	V-0	UL-94
Dimensional Stability	MD	A	$\leq \pm 0.2\%$	IPC-TM-650 NO.2.2.4
	TD			
Dielectric dissipation Factor		C1	0.040	IPC-TM-650 NO.2.5.5.3
Dielectric constant		C1	4.0	IPC-TM-650 NO.2.5.5.3
Insulation Resistance		C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life		---	12 month	25°C 65%

2.17 規格表: Table 22

Test Items	Condition of Treatment	NSEE301020BME	Test method
Peel strength	A	$\geq 0.5\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
	After immersion in chemical	$\geq 0.5\text{kgf/cm}$	
Solder Float Resistance	S1	210°C/10sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1	$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity	C1	$\geq 1.0 \times 10^{14} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	-----	No evident of defects	IPC-TM-650 NO.2.3.2
Dimensional Stability	MD	A	$\leq \pm 0.2\%$
	TD		
Insulation Resistance	C1	$\geq 1.0 \times 10^{10} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	---	12 month	25°C 65%RH

2.18 規格表: Table 23

Test Items	Condition of Treatment	NSEE401020BME	Test method
Peel strength	A	$\geq 0.5\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
	After immersion in chemical	$\geq 0.5\text{kgf/cm}$	
Solder Float Resistance	S1	210°C/10sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1	$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity	C1	$\geq 1.0 \times 10^{14} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	-----	No evident of defects	IPC-TM-650 NO.2.3.2
Dimensional Stability	MD	A	$\leq \pm 0.2\%$
	TD		
Insulation Resistance	C1	$\geq 1.0 \times 10^{10} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	---	12 month	25°C 65%RH



### 三.補強膠片產品規格:

#### 3.1 規格表: Table 24

Test Items	Condition of Treatment	FR2025AL	Test method
Peel Strength(180°C)	PI 面&CU 面	$\geq 1.0\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Chemical Resistivity	-----	No evident of defects	IPC-TM-650 NO.2.3.2
Adhesive Flow		$\leq 0.3\text{mm}$	IPC-TM-650 NO.2.3.17.1
Shelf life	<10°C	3 month	

### 3.2 規格表: Table 25

Test Items	Condition of Treatment	FR5025AL	Test method
Peel Strength(180°C)	PI 面&CU 面	$\geq 1.0\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Chemical Resistivity	-----	No evident of defects	IPC-TM-650 NO.2.3.2
Adhesive Flow		$\leq 0.3\text{mm}$	IPC-TM-650 NO.2.3.17.1
Shelf life	<10°C	3 month	

### 3.3 規格表: Table 26

Test Items	Condition of Treatment	FR7025AL	Test method
Peel Strength(180°C)	PI 面&CU 面	$\geq 1.0\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Chemical Resistivity	-----	No evident of defects	IPC-TM-650 NO.2.3.2
Adhesive Flow		$\leq 0.3\text{mm}$	IPC-TM-650 NO.2.3.17.1
Shelf life	<10°C	3 month	

### 3.4 規格表: Table 27

Test Items	Condition of Treatment	FR8025AL	Test method
Peel Strength(180°C)	PI 面&CU 面	$\geq 1.0\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Chemical Resistivity	-----	No evident of defects	IPC-TM-650 NO.2.3.2
Adhesive Flow		$\leq 0.3\text{mm}$	IPC-TM-650 NO.2.3.17.1
Shelf life	<10°C	3 month	

### 3.5 規格表: Table 28

Test Items	Condition of Treatment	FR9025AL	Test method
Peel Strength(180°C)	PI 面&CU 面	$\geq 1.0\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/30sec	IPC-TM-650 NO.2.4.13
Chemical Resistivity	-----	No evident of defects	IPC-TM-650 NO.2.3.2
Adhesive Flow		$\leq 0.3\text{mm}$	IPC-TM-650 NO.2.3.17.1
Shelf life	<10°C	3 month	

#### 四. Bonding Sheet 產品規格:

##### 4.1 規格表: Table 29

Test Items	Condition of Treatment	BS-10	Test method
Peel Strength	A	$\geq 1.0\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/60sec	IPC-TM-650 NO.2.4.13
Resin Flow		$\leq 0.1\text{mm}$	IPC-TM-650 NO.2.3.17.1
Shelf life	<10°C	3 month	
Adhesive		10 $\mu\text{m}$	

4.2 規格表: Table 30

Test Items	Condition of Treatment	BS-25	Test method
Peel Strength	A	$\geq 1.0\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/60sec	IPC-TM-650 NO.2.4.13
Resin Flow		$\leq 0.1\text{mm}$	IPC-TM-650 NO.2.3.17.1
Shelf life	<10°C	3 month	
Adhesive		25 $\mu\text{m}$	

五.FCCL(2L)產品規格:

5.1 規格表: Table 31

Test Items	Condition of Treatment	SR0505JY	Test method
Peel strength	A	$\geq 0.5\text{kgf/cm}$	IPC-TM-650 NO.2.4.9
Solder Float Resistance	S1	300°C/ 30sec	IPC-TM-650 NO.2.4.13
Surface Resistivity	C1	$\geq 1.0 \times 10^{13} \Omega$	ASTM D-257
Volume Resistivity	C1	$\geq 1.0 \times 10^{15} \Omega \cdot \text{cm}$	ASTM D-257
Chemical Resistivity	-----	No evident of defects	IPC-TM-650 NO.2.3.2
Flammability	-----	TBD	
Dimensional Stability	MD	A	$\leq \pm 0.1\%$
	TD		
Insulation Resistance	C1	$\geq 1.0 \times 10^{11} \Omega$	IPC-TM-650 NO.2.6.3.2
Shelf life	---	12 month	25°C 65%RH