



零件確認書

料號：8403SD32F143311

品名：PCB天線板 SD-32-F1-ANT-433 V1.1

規格：2L 2*8連片 T:1.6±0.1MM 無鉛噴錫

廠商料號：_____

廠商：寰電實業有限公司

廠牌：_____ ☐ 不限

承認日期：2023-03-06

備註：PCB確認者-陳品女弋

核准	主管	承辦
 <p>總經理室 2023-03-06 張再發</p>	 <p>硬體 2023-03-06 陳敏忠</p>	 <p>硬體 2023-03-06 施怡玫</p>

承認書

SPECIFICATION FOR APPROVAL

致 大鵬科技股份有限公司

送樣日期： 112 年 3 月 3 日

機 種：
Machinery 8403SD32F143311

板材尺寸： 2L FR4 1.6 mm

規格： 無鉛噴錫 2X8 PCS/PNL

此承認書均照貴司GERBER製作

認可章	簽 認	
	簽 准	
	校 對	
	設 計	

承認書專用章	公司：	震電實業有限公司
2023.03.03	地址：	桃園市平鎮區復旦路3段111巷2號2樓
震電實業有限公司	電話：	(03)493-7021
代表號:(03)-4937021	傳真：	(03)401-3489



寰 電 實 業 有 限 公 司

UNIVERSAL ELECTRONICAL ENTERPRISE CO., LTD.

桃園市平鎮區復旦路3段111巷2號2樓

TEL:(03)4937021 FAX:(03)4931602

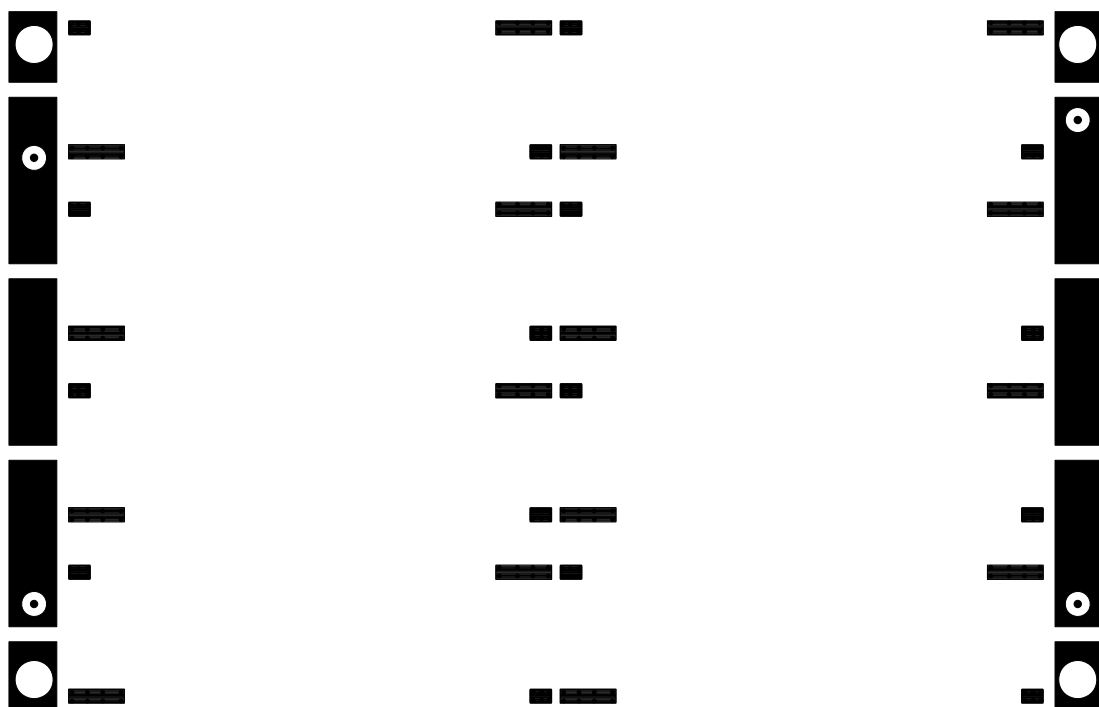
E-mail:kwpcb.one@msa.hinet.net

PCB 製作規格表

客戶名稱: 大鵬

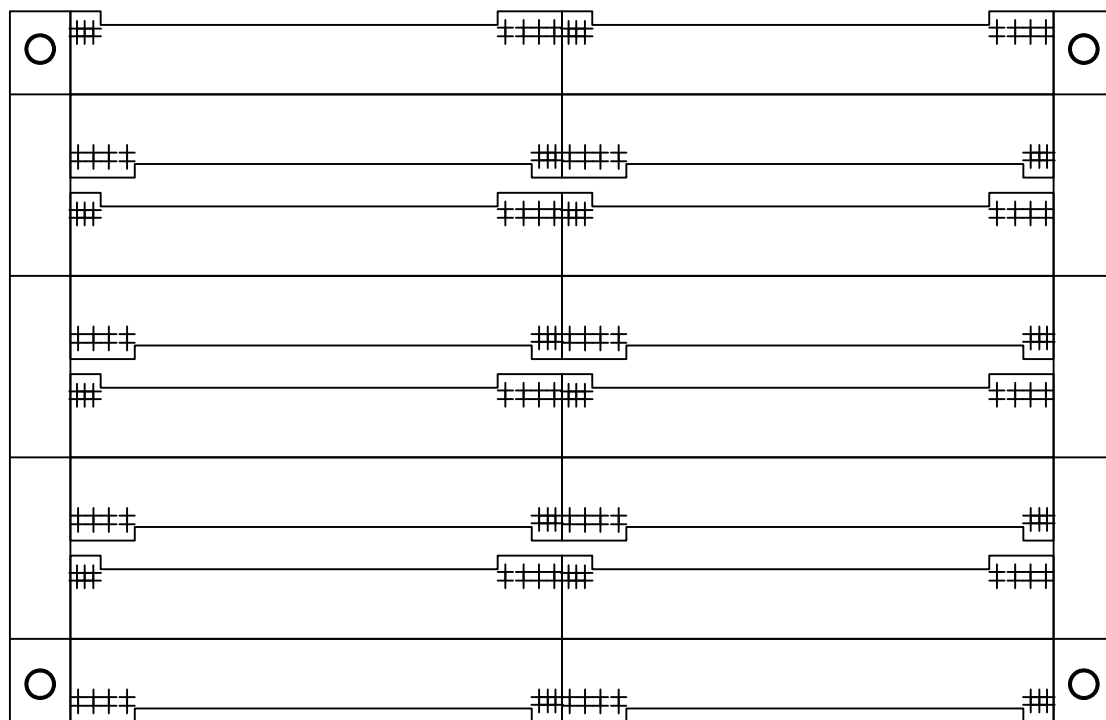
日期: 112/03/03

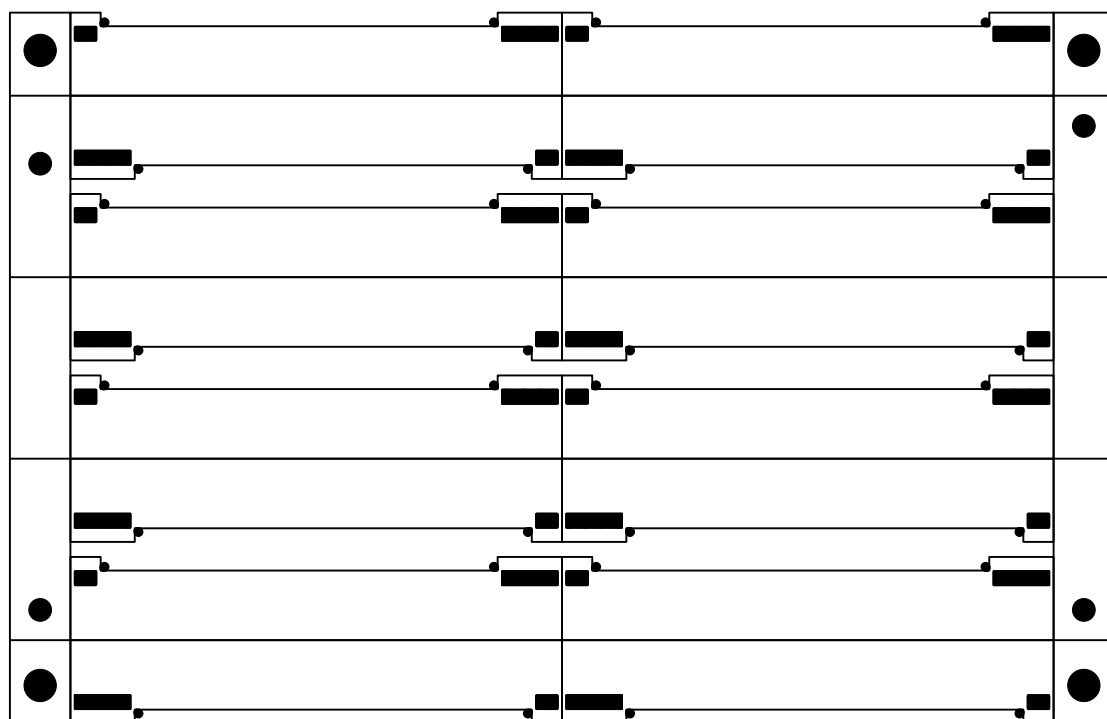
客戶料號	8403SD32F143311	廠內料號	
1. PCB 層數: <input type="checkbox"/> 單面板 <input checked="" type="checkbox"/> 雙面板 <input type="checkbox"/> 四層板 <input type="checkbox"/> ____板			
2. PCB 材質: <input checked="" type="checkbox"/> FR-4 <input type="checkbox"/> CEM-1 <input type="checkbox"/> 電木板 <input type="checkbox"/> 其他			
3. PCB 成品板厚: <input checked="" type="checkbox"/> 1.6mm <input type="checkbox"/> 1.2mm <input type="checkbox"/> 1.0mm <input type="checkbox"/> 0.85mm <input type="checkbox"/> ____mm			
4. 銅箔厚度: <input type="checkbox"/> 內層____1____oz 外層 <input checked="" type="checkbox"/> 1.0oz <input type="checkbox"/> 0.5oz <input type="checkbox"/> 2oz			
5. 電鍍: <input checked="" type="checkbox"/> 無鉛噴錫 <input type="checkbox"/> 化金____2____U <input type="checkbox"/> 鍍金 <input type="checkbox"/> 噴錫+金手指 <input type="checkbox"/> OSP <input type="checkbox"/> ____			
6. 防焊: ____2____面. 顏色: <input checked="" type="checkbox"/> 綠色 <input type="checkbox"/> 藍色 <input type="checkbox"/> 黃色 <input type="checkbox"/> 黑色 <input type="checkbox"/> ____色			
7. 文字: ____2____面. 顏色: <input checked="" type="checkbox"/> 白色 <input type="checkbox"/> 黑色 <input type="checkbox"/> ____色			
8. 外型: 單片尺寸 ____65____x ____11____mm. PNL 排板: ____2____x ____8____PCS/PNL 連片 PNL 尺寸 ____146____x ____94____mm			
9. 金手指規格: 鍍金厚度____U 斜邊角度____ 斜邊深度____			
10. 測試: <input checked="" type="checkbox"/> 外測 <input type="checkbox"/> 開治具 <input type="checkbox"/> 其它____			
11. 附件: <input checked="" type="checkbox"/> 客戶成品孔徑表 <input checked="" type="checkbox"/> 機構圖 <input checked="" type="checkbox"/> 材質證明 <input checked="" type="checkbox"/> 底片____1____套 <input checked="" type="checkbox"/> 實物板____1____片 <input checked="" type="checkbox"/> UL 黃卡 <input checked="" type="checkbox"/> 外測報告			

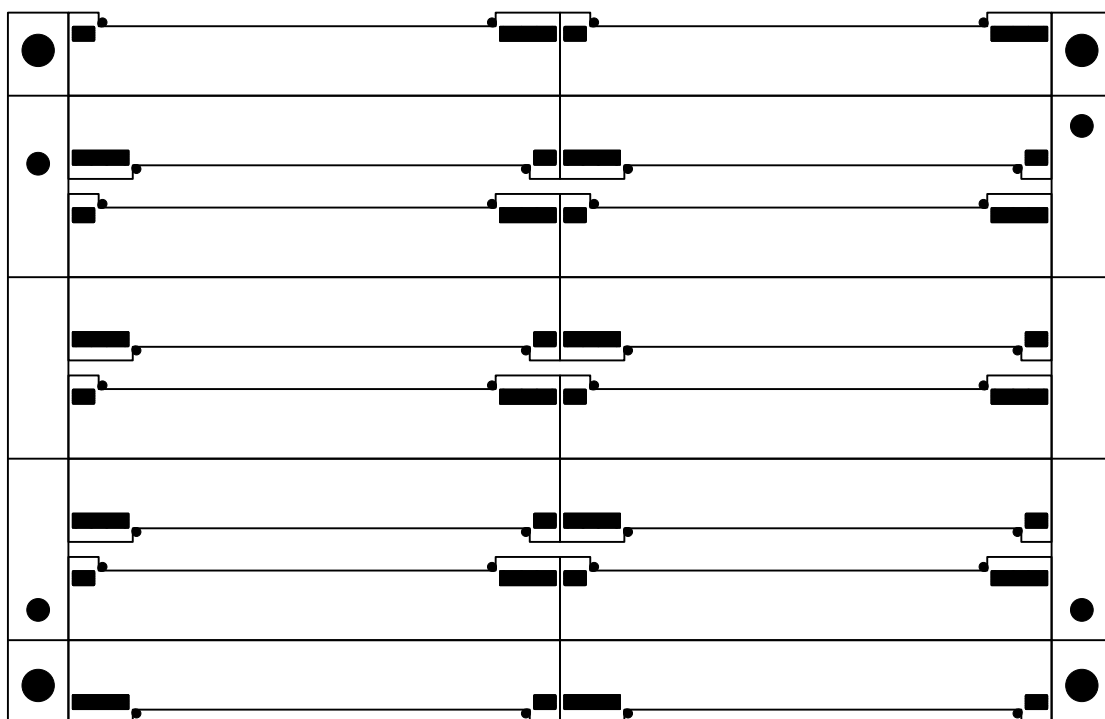


1-6無鉛噴錫防焊綠色文字白色

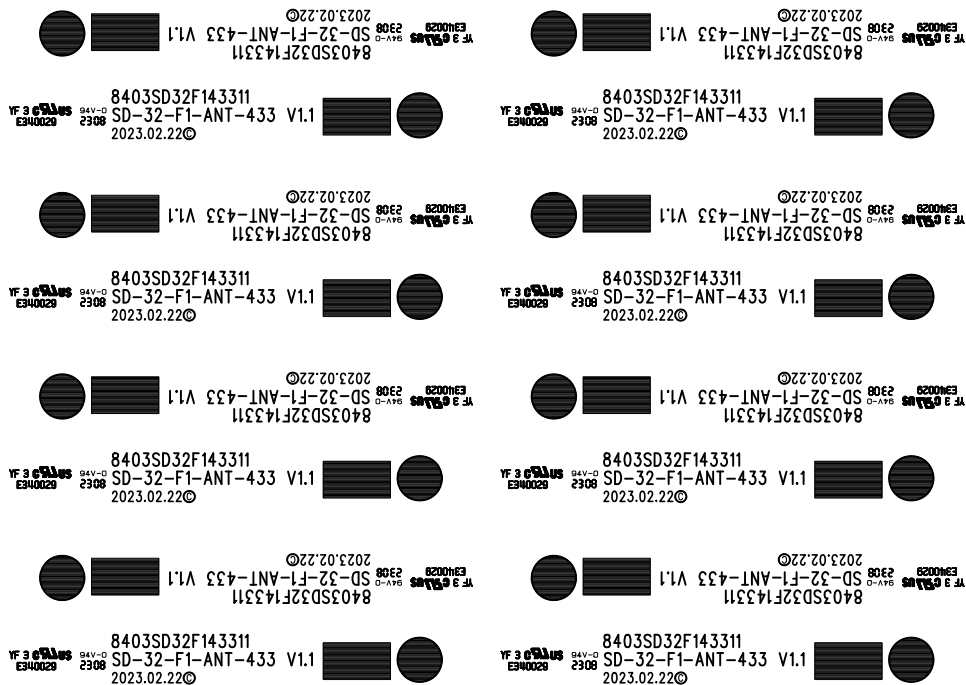
SIZE	QTY	SYM	PLATED	TOL
11.81	14	+	YES	+/-0.0

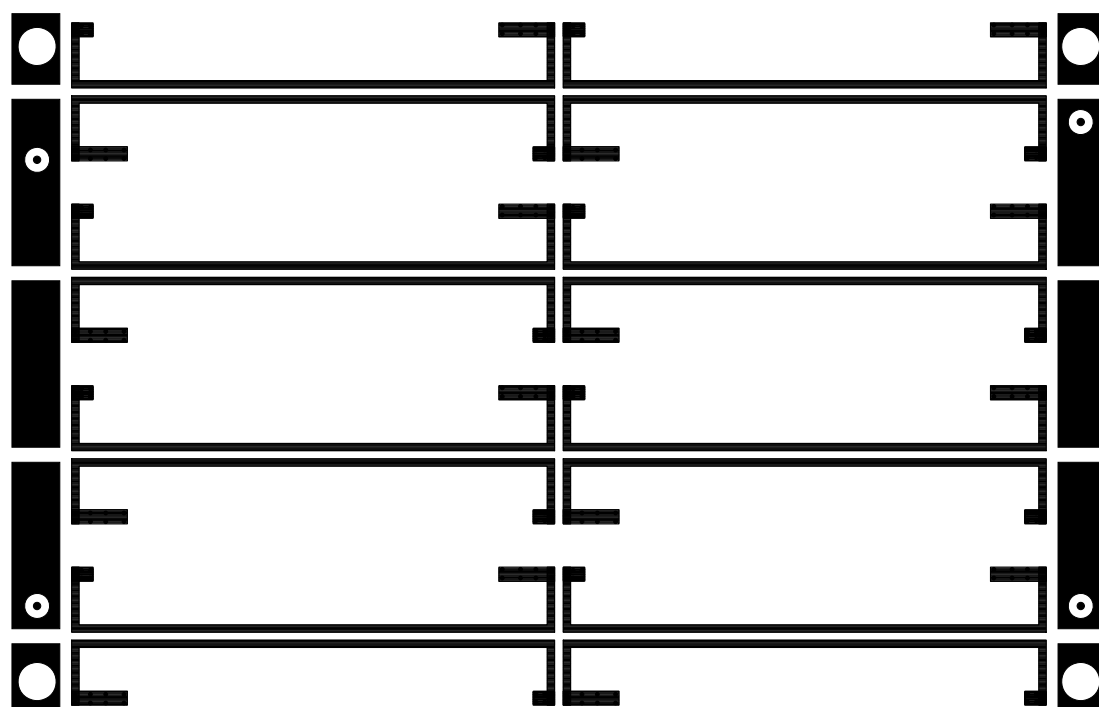






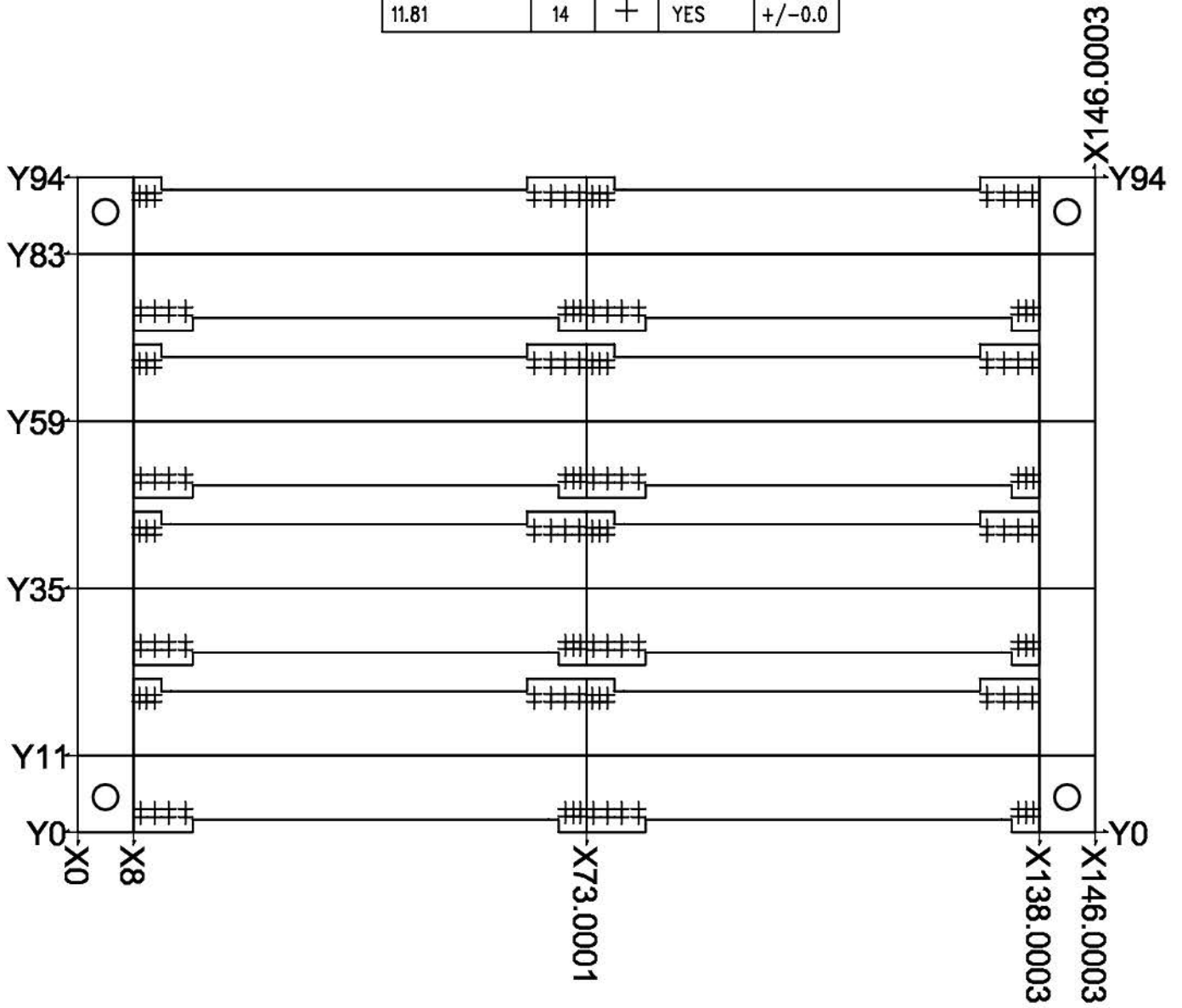
8403SD32F143311





1-6無鉛噴錫防焊綠色文字白色

SIZE	QTY	SYM	PLATED	TOL
11.81	14	+	YES	+/-0.0





ZPMV2.E340029 Wiring, Printed - Component

Enhanced searching capability for this category can be found in UL's iQ Family of Databases (iq.ul.com).

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Wiring, Printed - Component

[See General Information for Wiring, Printed - Component](#)

CHUN SHIN ENTERPRISE CO LTD
31 LANE 197 CHENG TAI RD, SEC 2
WUKU HSIANG, TAIPEI 24870 TAIWAN

E340029

Cond Width				Max			Max			Meets	C
	Min	Cond	SS/	Area	Solder	Oper				UL796	T
	Min	Edge	Thk	DS/	Diam	Limits	Temp	Flame	UL796	T	
Type	mm(in)	mm(in)	mic(mil)	DSO	mm(in)	C	sec	C	Class	DSR	I
Multilayer printed wiring boards.											
4	0.15 (0.006)	0.15 (0.006)	17 (0.67) Int:102	DS	50.8 (2.0)	288	10	130	V-0	All	3
Single layer printed wiring boards.											
2	0.15 (0.006)	0.15 (0.006)	17 (0.67)	DS	50.8 (2.0)	288	10	120	V-0	-	3
3	0.15 (0.006)	0.15 (0.006)	17 (0.67)	DS	50.8 (2.0)	288	10	120	V-0	All	3

Marking: Company name or tradename "YF" and type designation. May be followed by a suffix to denote factory identification.
Last Updated on 2010-11-11

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NAN YA PLASTICS CORPORATION
COPPER CLAD LAMINATE
QUALITY TEST REPORT

2, Chung-Yang Ind. Park,
Hsin-Kang Hsiang,
Jiayih, Taiwan

TEL: (05)3772111

FAX: (05)3771640

DATE: 2018/05/03

PALLET NO:

CUSTOMER: 宇發實業

ORDER NO: HC5158V1

LOT NO: 8427242D

MATERIAL SPEC.: UV BLOCK, FR-4-86 H/H 1.50mm 1245mm x 940mm W/LU (OVERALL THICKNESS)

IPC DESIGNATION: L21 0580 EXC HH/HH B/A 49" x 37" (f x g)
L21 0590 IN HH/HH B/A 49" x 37" (f x g)

REQUIREMENT: IPC-4101E

UL FILE: E98983

GLASS FIBER: NAN YA Hsin-Kang Taiwan

COPPER FOIL: NAN YA Hsin-Kang Taiwan

EPOXY RESIN: NAN YA Mailiao Taiwan

NAN YA PLASTICS
COPPER CLAD LAMINATE
QUALITY ASSURANCE

TEST ITEM	UNIT	TEST METHOD	SPECIFICATION	RESULTS
VISUALS	-	IPC-4101E	B	OK
SURFACE & SUBSURFACE	-	IPC-4101E	B	OK
METAL THICKNESS(UP)	μm	IPC-4101E	Hot: 15.54-19.00	18.41
METAL THICKNESS(DOWN)	μm	IPC-4101E	Hot: 15.54-19.00	10.74
PERMITTIVITY(1MHZ)	-	C-24/23/50	5.4 ↓	4.67
PERMITTIVITY(1GHZ)	-	C-24/23/50	5.4 ↓	4.47
LOSS TANGENT(1MHZ)	-	C-24/23/50	0.035 ↓	0.017
LOSS TANGENT(1GHZ)	-	C-24/23/50	0.035 ↓	0.011
SURFACE RESISTIVITY	MΩ	C-98/35/90	<0.50mm: 10 ¹⁴ ↑; ≥0.50mm: ---	2.3E7
SURFACE RESISTIVITY	MΩ	E-24/125	10 ¹³ ↑	4.4E6
VOLUME RESISTIVITY	MΩ-cm	C-98/35/90	<0.50mm: 10 ¹⁶ ↑; ≥0.50mm: ---	7.2E8
VOLUME RESISTIVITY	MΩ-cm	E-24/125	10 ¹³ ↑	3.2E6
ARC RESISTANCE	sec	D-48/50+D-0.5/23	60 ↑	121
FLEXURAL STRENGTH	N/mm ²	LENGTHWISE A	415 ↑	484
FLEXURAL STRENGTH	N/mm ²	CROSSWISE A	345 ↑	423
THERMAL STRESS	-	288°C x 40sec	NO. BLISTER DELAMINATION	OK
WARP AND TWIST	%	A	SINGLE DOUBLE	0.41
			0.5-0.78mm: 2.0 ↓ 1.5 ↓	
			>0.79mm: 1.5 ↓ 1.0 ↓	
PRESSURE VESSEL	-	15psi x30min + 260°C x20sec	IPC-TM-650	OK
MOISTURE ABSORPTION	%	E-1/105+DES+D-24/23	0.80 ↓	0.001
PEEL STRENGTH(UP)	lb/in	AFTER THERMAL STRESS	<0.5mm: 4.57 ↑; ≥0.5mm: 6.0 ↑ NP-180/NPG-200/NPC-180: <0.5mm: 3.5 ↑; ≥0.5mm: 5.0 ↑	9.21
PEEL STRENGTH(DOWN)	lb/in	AFTER THERMAL STRESS	<0.5mm: 4.57 ↑; ≥0.5mm: 6.0 ↑ NP-180/NPG-200/NPC-180: <0.5mm: 3.5 ↑; ≥0.5mm: 5.0 ↑	8.71
TG GLASS TRANSITION TEMP	°C	K-2/105	130 ↑ (DSC)	138.2/138.8
FLAMMABILITY	sec	C 48/23/50 E-24/125	UL-94-V0 VDE-0860	OK
DIELECTRIC BREAKDOWN	KV	D-48/50+D-0.5/23	40 ↑	51
CONSTRUCTION	-	A	7628*8	7628*8
THICKNESS(MAX.)	mm	A	≤1.2mm: CLASS C/M; >1.2mm: CLASS B/L	1.519
THICKNESS(MIN.)	mm	A	≤1.2mm: CLASS C/M; >1.2mm: CLASS B/L	1.498
THICKNESS(AVG.)	mm	A	≤1.2mm: CLASS C/M; >1.2mm: CLASS B/L	1.508
COPPER ROUGHNESS(S/S)UP	μm	IPC-4562	Ra: ≤0.4/Rz: ≤2.5 TYPE:ITE	0.23/2.24
COPPER ROUGHNESS(M/S)UP	μm	IPC-4562	Ra: ≤1.3/Rz: ≤7.5	1.18/6.01

THIS IS TO CERTIFY THAT THE MATERIAL BEING FURNISHED TO YOU MEETS THE IPC-4101E, RoHS AND SS-00259.
THE RESULTS OF THIS QUALITY TEST REPORT IS PASS.

APPROVED BY

N. C. Cheng

