

承 認 書

APPROVAL SHEET

CUSTOMER: 連宇股份有限公司

CUSTOMER MODEL NO.:

JOYMAX MODEL NO.: CBF-A045MPXX-167

DESCRIPTION #A045 PCB Antenna

REV.: 03

DATE 2014/9/24

Customer Approval

Joymax Approval



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Item

1. Drawing

2. Test report

- Electrical test
- Pattern test

3. Specification

- Connector
- Cable

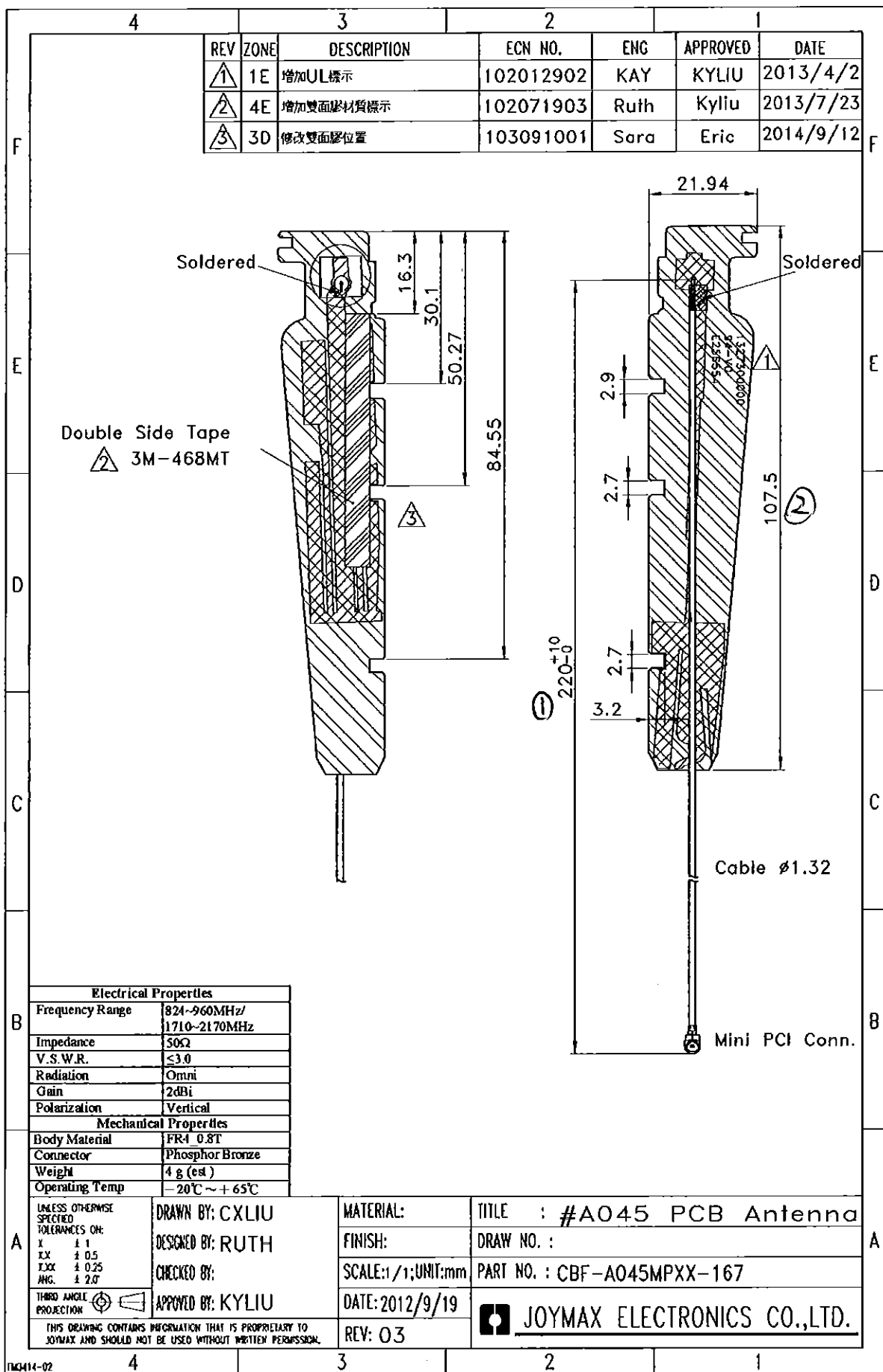
4. Packing

- PE Bag
- Carton

Modification History:

Rev.	Date	Content
00	2012/9/18	
01	2013/3/22	
02	2013/7/22	增加雙面膠材質標示
03	2014/9/24	修改雙面膠位置



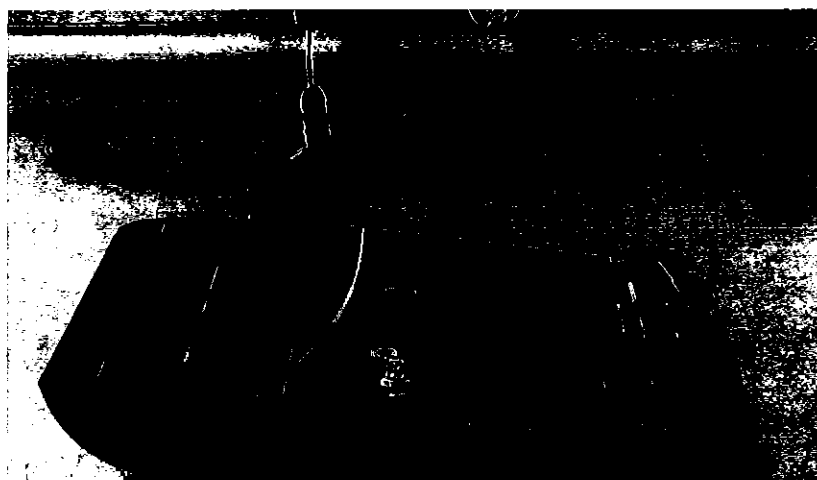
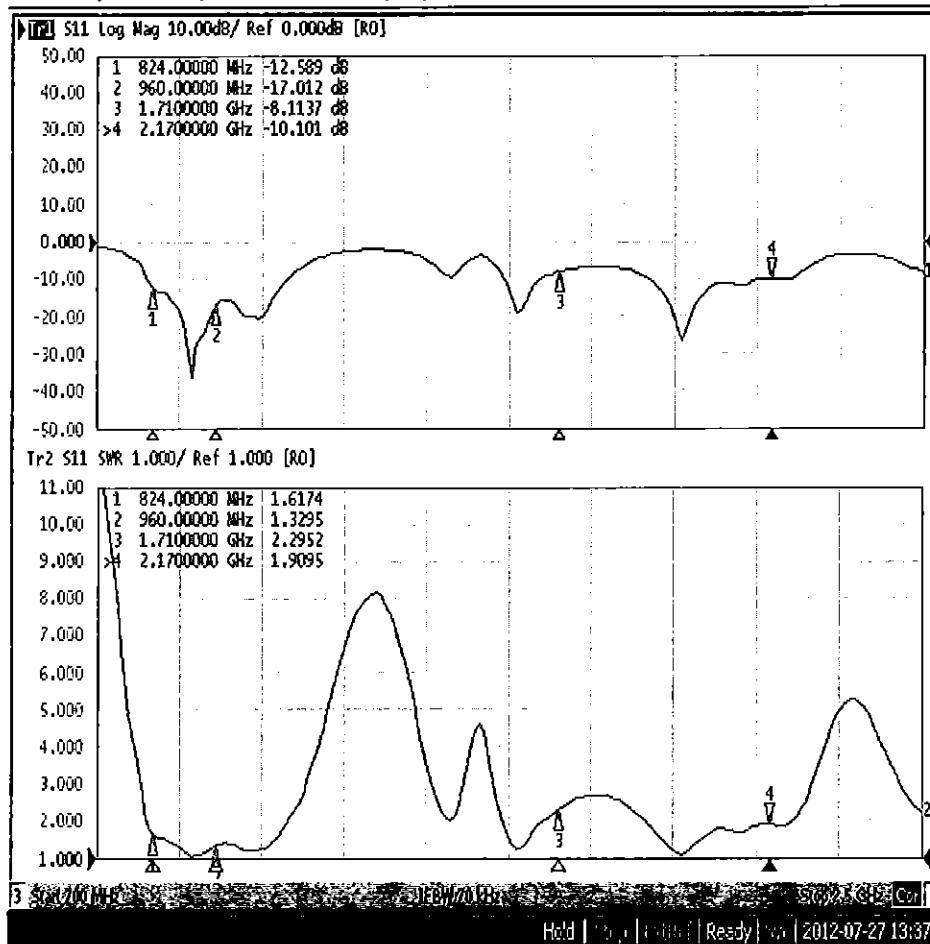


Model. CBF-A045MPXX-167

Test Report

Return loss/V.S.W.R

Return loss 1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State



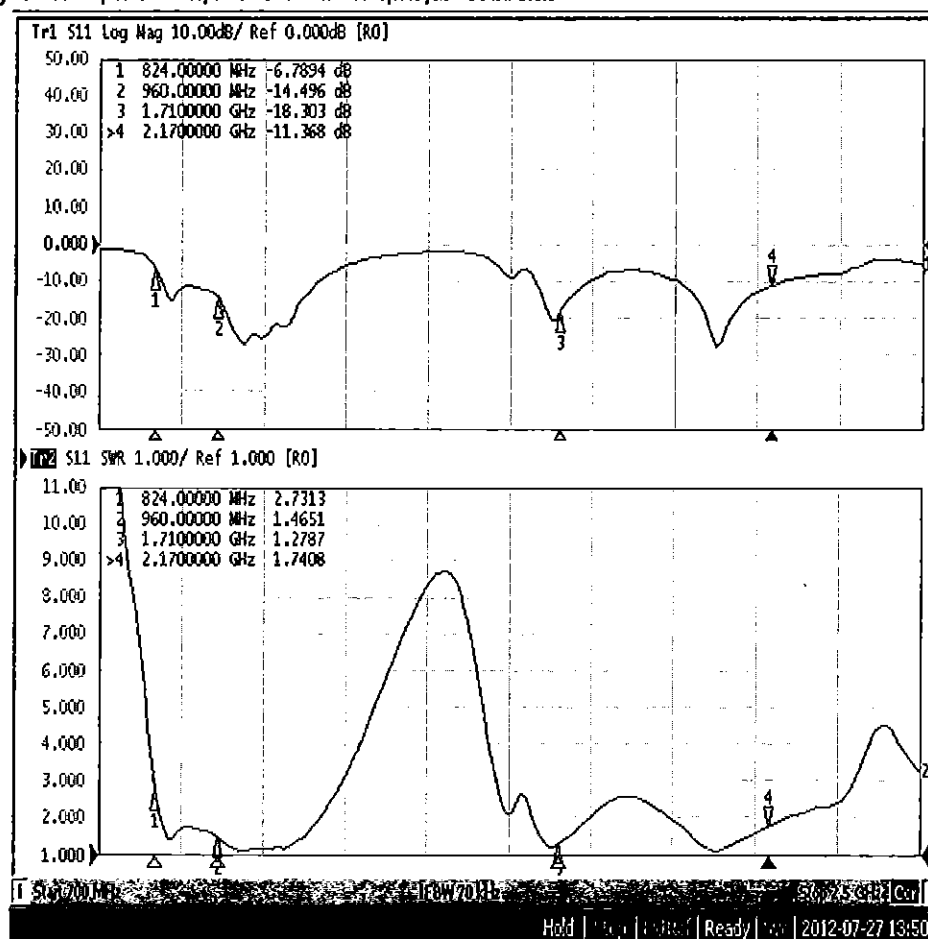
Model. CBF-A045MPXX-167

Test Report

Return loss/V.S.W.R

Return loss 1 Active Ch/Trace 2 Response 3 Stimulus 4 Mkr/Analysis 5 Instr State

V.S.W.R.

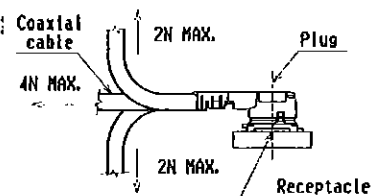


Connector

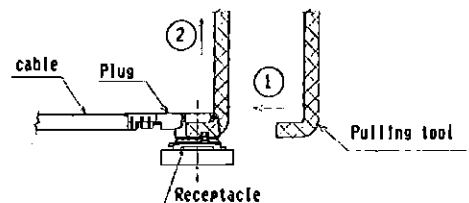
Mini PCI Conn

Specification Data	1) Impedance	50 $\pm$ 2 Ω (TDR)
	2) Frequency Range	0~6GHz
	3) V.S.W.R.	1.3Max.(DC0.1~3GHz), 1.5Max.(3~6GHz)
	4) Insulation resistance	$\geq$ 500 M Ω .km
	5) Dielectric withstanding voltage	AC1000V, 1 minute No creeping discharge

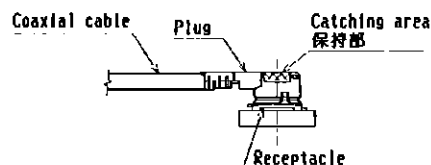
Environmental Data	1) Operating Temperature	-40°C ~ +90°C
	2) Permissible load of cable at mating	



- 3) In case of unmating by pulling tool : Please use the pulling tool as the following drawing and please pull plug to vertical direction as directly as possible



- 4) In case of unmating directly by hand: Please catch the catching area of plug, and please pull plug to vertical direction as directly as possible.



Material Specifications	Material Data	Material
	1) Body	Phosphor Bronze
	2) Contact	Phosphor Bronze
	3) Insulator	PBT (UL94-V0)

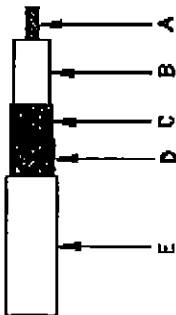
	<u>Construction:</u>	A) Center Conductor: Mat'l: 32 AWG(7/.0031") SPCW* OD .0053" $\pm$.0005"	<u>Electrical Properties:</u>		Impedance: 50 $\pm$ 2 Ohms Capacitance: 28.9 pF/ft Nom. Velocity of Propagation: 70 % Nom. VSWR(.10 - 6.00GHz) - 1.25:1 Mean
B) Dielectric:	FEP	OD: .025" $\pm$.002	Ramp Function	Start: .10GHz	End: 6.00GHz
C) Shield:	44 AWG SPC*	90 % Min. Coverage	Mean	1.10:1	1.40:1
OD	.034" Nom.		Max.	17.9	20.6 dB/100ft.
			Attenuation @ .10 GHz	36.4	41.9 dB/100ft.
			.90 GHz	54.0	62.1 dB/100ft.
			1.00 GHz	58.6	67.4 dB/100ft.
			2.00 GHz	84.5	97.1 dB/100ft.
			2.45 GHz	90.3	103.9 dB/100ft.
			3.00 GHz	105.0	120.7 dB/100ft.
			4.00 GHz	122.7	141.1 dB/100ft.
			5.00 GHz	138.7	159.5 dB/100ft.
			6.00 GHz	153.4	176.4 dB/100ft.
E) Jacket:	Fluorinated Ethylene Propylene(FEP)	OD .052" $\pm$.003 (1.32mm)			

TABLE II - BASE MATERIALS

Type	Base Material &												
	Individual Laminate Matl.				Individual Bonding Sheet Matl.				Total Build-Up Thk. (mm)	Conductor Thk. # (mic)	PWB Mfg. Proc.	Meets UL 746E DSR	CTI (PLC)
	UL/ ANSI Grade	Mfr. +	Grade	Min. Thk. (mic)	UL/ ANSI Grade	Mfr. +	Grade	Min. Thk. (mic)					
M	FR-4	NY	FR-4-86, UV Block FR-4-86	100	FR-4	NY	NP-140B	50	0.38	E:17 I:68	A-M	Yes	-
	FR-4	NY	NP-140R, NP-140TL	100	FR-4	NY	NP-140B	50	0.38	E:17 I:68	A-M	Yes	-
	FR-4	TL	LS-4Y	100	FR-4	NY	NP-140B	50	0.38	E:17 I:68	A-M	Yes	-

* - Recognized Component, (QMTS2)

* - NY: Nan Ya (E98983); TL: Taiwan Leader (E176891).

* - I = Maximum internal thickness; E = Minimum external thickness

SOLDER RESISTS

Types	Process	Solder Resists ^a
M	A-M	1, 2, 3, 4

* - Solder Resist Grades (Recognized Component, QMJU2):

No.	Solder Resist		
	Manufacturer	Grade	File Number
1.	Taiyo	PSR-2000AM/CA-25 (GN, BL)	E69262
2.	Taiyo	PSR-2000AN/CA-25AA (GN, RD, BL, YL, WT)	E69262
3.	Taiyo	PSR-2000BK/CA-25BK (GN)	E69262
4.	Taiyo	PSR-4000CD/CA-40CB (BK)	E69262
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			

UL

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TABLE II - BASE MATERIALS

Type	Base Material &			Min. Thk. (mm)	Min. Copper Thk. (mic)	SS/ DS ^o	PWB Mfg. Process	Meets UL 746E DSR	CTI (PLC)
	UL/ ANSI Grade	Mfr +	Grade						
DS-1	FR-4	NY	FR-4-86, UV Block FR-4-86	0.18	33	DS	A-D	Yes	-
DS	FR-4	NY	FR-4-86, UV Block FR-4-86	0.30	17	DS	A-D	Yes	-
	FR-4	NY	NP-140TL	0.38	17	DS	A-D	Yes	-
	FR-4	TL	LS-4Y	0.38	17	DS	A-D	Yes	-

& - Recognized Component, (QNT82)

@ - SS - Single Sided; DS - Double Sided or Single Sided

+ - NY: Nan Ya (E98983); TL: Taiwan Leader (E176891).

SOLDER RESISTS

Types	Process	Solder Resists ^o
DS-1	A-D	1, 3
DS	A-D	2, 4, 5, 6

@ - Solder Resist Grades (Recognized Component, QMJU2):

No.	Solder Resist		
	Manufacturer	Grade	File Number
1.	Taiyo	PSR-2000AM/CA-25 (BL)	E69262
2.	Taiyo	PSR-2000AM/CA-25 (GN, BL)	E69262
3.	Taiyo	PSR-2000AN/CA-25AA (GN)	E69262
4.	Taiyo	PSR-2000AN/CA-25AA (GN, RD, BL, YL, WT)	E69262
5.	Taiyo	PSR-2000BK/CA-25BK (GN)	E69262
6.	Taiyo	PSR-4000CD/CA-40CD (DK)	E69262
7.			
8.			
9.			
10.			
11.			
12.			



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JOYMAX ELECTRONICS CO., LTD.



ZPMV2.E256554
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](#)

TURBOARD TECHNOLOGICS INC

E256554

107 SEC 1 CHANGXING RD
 LUZHU SHIANG
 TAOYUAN HSIEN, 338 TAIWAN

Type	Cond Width		Cond Thk	SS/ DS/ DSO	Max		Max		Meets UL796 DSR	C
	Min	Min			Area	Solder	Oper	Flame		
	mm(In)	Edge			Diam	Limits	Temp	Class		
	mm(In)	mm(In)	mil(mil)	DSO	mm(In)	C	sec	C		
Multilayer printed wiring boards.										
M	0.07 (0.003)	0.10 (0.004)	17 (0.67)	Int:68	DS	76.2 (3.0)	288	10	130	V-0 All *
Single layer printed wiring boards.										
DS	0.07 (0.003)	0.10 (0.004)	17 (0.67)	DS	76.2 (3.0)	288	10	130	V-0	All *
DS-1	0.07 (0.003)	0.07 (0.003)	33 (1.30)	DS	76.2 (3.0)	280	10	105	V-0	All *

* - CTI PLC is marked on individual board.

Marking: Company name or trademark
 factory identification.

TurBoard, TB

and type designation. May be followed by a suffix to denote

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