SPECIFICATION FOR APPROVAL

DESCRIPTION: Pitch 1.00 mm Wi	ire To Board Connector, V/T ,SMT Type	
CUSTOMER PROD.NO/DWG.NO:		
E&T PROD.NO:	3761K-XXXX-XXX	
APPROVAL SHEET NO:		
E&T DWG. NO./DOCUMENT:	3761K-XXXX-XXX	
		REV: A2

PLEASE RETURN TO US ONE COPY OF SPECIFICATION FOR APPROVAL WITH YOUR APPROVED SIGNATURES.

APPROVED SIGNATURES						



ENTERY INDUSTRIAL CO., LTD. E&T ELECTRONICS (DONG GUAN) CO., LTD. E&T ELECTRONICS (SU ZHOU) CO., LTD.

Title:Pitch 1.00 mm Wire To Board Connector, V/T,SMT Type

Rel	ease History	Title: Pitch 1.00mm Wire To Board Con	nnector, V/T,SMT Type
A2	2013/5/23	This Document Contains Information	
Rev	Description	E&T And Should Not Be Used Withou	ıt Written Permission
Docum	ent No.	Prepared By: Juno Chen,	Date: 09,15'2009
l		Charled Dry	Deter

3761K-XXXX-XXX

repared by, sum energy	Date: 07,13 2007
Checked By:	Date: 7/07/2
pproved By:	Date:

GROUP AND TEST SEQUENCE

	Test of Examination				,	Test	Gr	oup)			
			В	С	D	Е	F	G	Н	I	J	K
1	Examination of Product	1,9	1,6	1,5	1,5	1,5	1,3	1,3	1,3	1,5	1,5	
2	Contact Resistance	2,6	2,5	2,4	2,4	2,4				2,4	2,4	
3	Insulation Resistance	3,7										
4	Dielectric Strength	4,8										
5	Insertion Force And Withdrawal Force		3									
6	Terminal / Housing Retention Force											1
7	Durability		4									
8	Vibration			3								
9	Heat Resistance				3							
10	Cold Resistance					3						
11	Humidity	5										
12	Solder Ability						2					
13	Resistance To Soldering Heat							2				
14	Steam Aging								2			
15	Salt Spray									3		
16	Temperature Cycling										3	

PRODUCT SPECIFICATION

1. SCOPE:

This specification covers the 1.00 mm pitch Wire To Board connector series.

2. PRODUCT NAME AND PART NUMBER:

Product Name	E&T Part Number
1.00mm Wire To Board Connector, V/T,SMT Type	3761K-XXXX-XXX

3. RATINGS:

Item	Standard	
Rated Voltage (MAX.)	125 V	AC/DC
Rated Current (M.)	1 A	AC/DC
Ambient Temperature Range	-40°C ~ +85°C	

^{*}Including temperature rise in applying electrical current

4.PERFORMANCE:

4- 1 Electrical Performance

Item		Test Condition	Requirement
4-1-1	Contact Resistance	Test Current: 10 mA Max. Test Voltage: 20mV Max Test Method: MIL-STD-202F, Method 303	20 mΩ MAX.
4-1-2	Insulation Resistance	Test Voltage: 500V DC. Test Duration: 1 minutes. Test Method: MIL-STD-202, method 302	100 MΩ Min.
4-1-3	Dielectric Strength	Test Voltage: 250 V AC. Test Time: 60 sec. Test Method: MIL-STD-202, Method 301.	No Breakdown

4-2 Mechanical Performance

	Item Test Condition Requ		Require	ement
4-2-1	Insertion Force And Withdrawal Force	Test Speed: 25±3 mm/min. Test Method: MIL-STD-1344A, Method 2016.		
4-2-2	Terminal / Housing Retention Force	Test Speed: 25mm/min.	0.5kgf (Min)	
		The contacts of connector shall be subject to	Contact Resistance	
4-2-3	Durability	30 cycles of mating and unmating.	Initial Value	\leq 20 m Ω
			Final Value	$\leqq 40 \text{ m}\Omega$

4-3 Environmental Performance and Others

	Item	Test Condition	Require	ment
		Amplitude : 1.5 mm Frequency range: 10~55~10 Hz in 1 minute	Appearance	No Damage
4-3-1	Vibration	Duration: 2 hours in each X.Y.Z axes Current: 100mA. Test Method: MIL-STD-202F, Method 201	Contact Resistance	≦40 mΩ
		Test Method: MIE-01B-2021, Method 201	Discontinuity	1µsec
4-3-2	Heat	Temperature: 85±3°C Duration: 96 hours	Appearance	No Damage
4-0-2	Resistance	Test Method: MIL-STD-202, Method 108.	Contact Resistance	\leq 40 m Ω
4-3-3	Cold	Temperature: -40±2°C Duration: 96 hours Test Method: JIS C60068-2-1	Appearance	No Damage
4-3-3	Resistance	rest Method. dio Coccoo-2-1	Contact Resistance	\leq 40 m Ω
		Temperature: 40±2℃ Relative Humidity: 90~95%	Appearance	No Damage
4-3-4	Humidity	Duration: 96 hours Test Method: MIL-STD-202F , Method 103	Contact Resistance	\leq 40 m Ω
1-3-4	Trairiidity		Insulation Resistance	≥50MΩ
			Dielectric Strength	Must meet 4-1-3
4-3-5	Solder Ability	Soldering Time : $3\pm0.5~\text{sec}$ Solder Temperature : $245\pm5^{\circ}\text{C}$ Test Method: MIL-STD-202F , Method 208G	Solder Wetting	95% Of Immersed Area Must Show No Voids, Pin Holes

	Item	Test Condition	Requi	rement
4-3-6	Resistance To Soldering Heat	Soldering Time : 10±0.5 sec Solder Temperature : 260±5℃ Test Method: MIL-STD-202F , Method 210A	Appearance	No Damage
		Steam Aging Temperature : 98±2℃ Duration: 8 hours Solder Temperature : 245±5℃	Appearance	No Damage
4-3-7	Steam Aging	Soldering Time : 3±0.5 sec Test Method: MIL-STD-202F , Method 208	Solder Wetting	95% Of Immersed Area Must Show No Voids, Pin Holes
4-3-8	Salt Spray	Chamber Temperature : 35±2°C Air Tank Temperature : 47±1°C Salt Solution : 5 ± 0.5% Duration : 48 hours	Appearance	No Damage
	Guit Opiay	Test Method: MIL-STD-202, Method 101D	Contact Resistance	\leq 40 m Ω
4-3-9	Temperature	5 cycles of : a) - 40 $\pm 3^{\circ}$ C 30 minutes b) +25 $\pm 3^{\circ}$ C 30 minutes	Appearance	No Damage
7-3-9	Cycling	c)+ 85 $\pm 2^{\circ}$ C 30 minutes Test Method: JIS C0025	Contact Resistance	\leq 40 m Ω

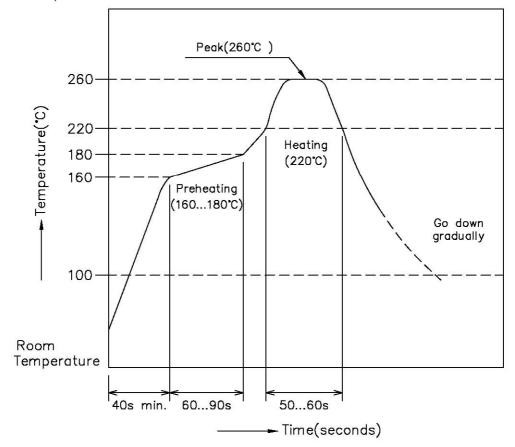
5-1

NO of CKT	At in	nital	At 30th
	I.F(max.)	W.F(min.)	W.F(min.)
16	46(4.7)	4.6(0.47)	4.6(0.47)
20	50(5.10)	5(0.510)	5(0.510)
24	54(5.50)	5.4(0.55)	5.4(0.55)
30	60(6.12)	6(0.612)	6(0.612)
40	70(7.14)	7(0.714)	7(0.714)
50	80(8.16)	8(0.816)	8(0.816)

Unit:N(kgf)

INFRARED REFLOW CONDITION

- 1) Ascending time to preheating temperature 170°C shall be 40 seconds minimum.
- 2) Preheating shall be fixed at 160...180°C for 60...90 seconds.
- 3) Heating shall be fixed at 220°C for 50...60 seconds.
- 4) At 260±5°C peak shall be 10 seconds maximum.



Wire To Board Handling Precautions

This manual is to describe basic precautions. When there are doubtful points in use of, please contact E&T.

1. Common Handling Precautions

- Do not expose E&T's wire to board connector, processing process product and processing product to corrosive substance, corrosive gas, high temperature and high humidity and direct sunshine. It causes corrosion of contact and deterioration of insulation performance of housing, etc., so that it causes motion defect of appliances.
- Do not apply external load to E&T's wire to board connector, processing process product and processing product. Deformation and breakage, etc. occur, and it causes performance defect of.
- There may be slight differences in the housing coloring, but there will be no influence on the product's performance.
- Please do not conduct any "washing process" on the connector because it may damage the product's function.
- E&T's wire to board connector is not designed for the mating and unmating of the connectors to be performed under the condition of an active electrical circuit. It may cause a spark and product defect if the connectors are mated and unmated in this way.

2. PC Board Precautions

- Exercise caution when handling boards with the connectors installed. Do not apply any forces affecting soldered joints. (see figure 1).
- The mounting specification for coplanarity does not include the influence of warpage of the printed circuit board. (see figure 1).
- Changing recommended pattern causes problems.

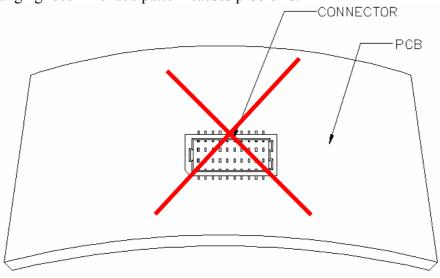


Figure 1.

3. Precautions Crimped Terminal Insertion

- Terminal must be inserted horizontally oriented (see figure 2).
- Do not attempt to insert crimped terminal in any other direction. (see figure 2).

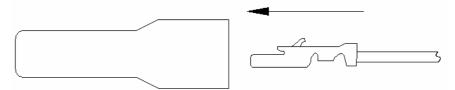
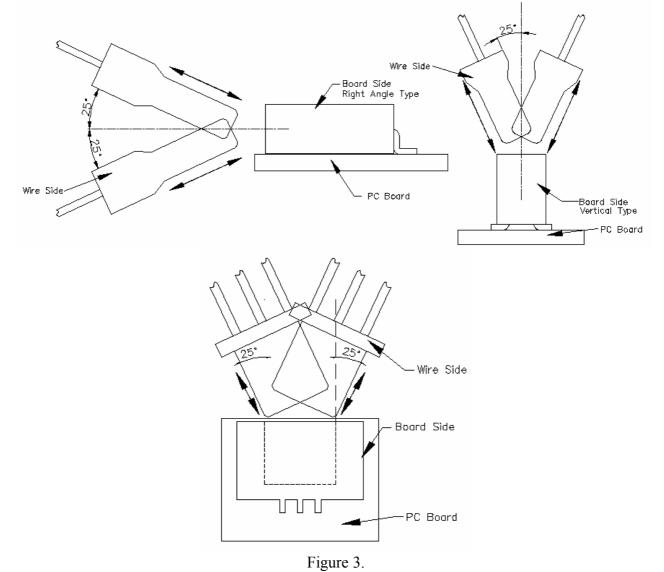


Figure 2.

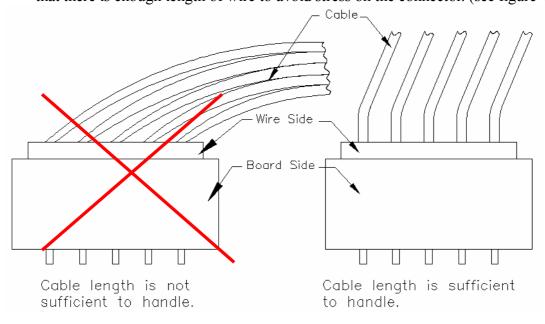
4. Precautions When Inserting or Withdrawal Wire To Board

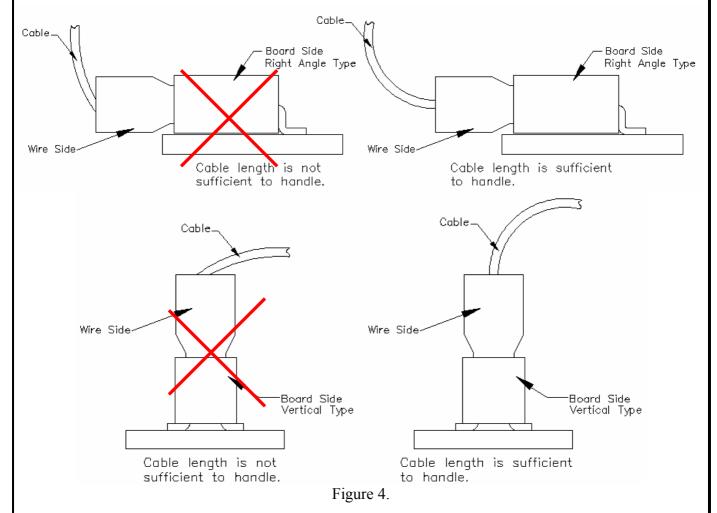
- Do not insert and remove at an angle of 25° or greater. Doing so will cause contact deformation or case damage. (see figure 3).
- Push the wire side connector until firmly closed. At this time, confirm that the wire side connector is mated securely.
- When mounting of connectors, its slant or aberration shall be 3° max.
- Do not insert and remove the connectors when the board side connector is not mounted on the PC board.
- Used Lock type, when removed to connectors, please released positive locks.



5. Precautions Cable Assembly

• The cable assembly should not have a constant stress or pulling force applied on it when it is in the mated condition. Therefore, when designing the wire positioning, please ensure that there is enough length of wire to avoid stress on the connector. (see figure 4).





RELEASE HISTORY

Rev.	Revisions	Date	Executor	Description
A0	First Release	SEP-15-2009	JUNO	First Release
A1	RE201110012	NOV-01-2011	JIMMY	Add Handing Precautions
	RE201111014			LCP 6130LX Change LCP E130I
	RE201111028			Cancel Packaging Spec
A2	REN130513	MAY-23-2013	JUNO	Add 16PIN IF.&WF. SPEC