

TO

SPECIFICATION FOR APPROVAL

DESCRIPTION: Pitch 0.50mm Board To Board Connector, V/T, SMT Type Male

CUSTOMER PROD.NO/DWG.NO:

E&T PROD.NO: 1000K-XXXX-XXX

APPROVAL SHEET NO:

E&T DWG. NO./DOCUMENT: 1000K-XXXX-XXX

REV: A3

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.**

ENTERY INDUSTRIAL CO., LTD.

**Title :Pitch 0.50mm Board To Board Connector,
V/T, SMT Type Male**

Release History		Title: Pitch 0.50mm Board To Board Connector, V/T, SMT Type Male	
A3	12,22'2011	This Document Contains Information That Is Proprietary To E&T And Should Not Be Used Without Written Permission	
Rev	Description		
Document No. 1000K-XXXX-XXX		Prepared By: Juno Chen	Date: 2010/4/27
		Checked By: <i>[Signature]</i>	Date: 12/22/2011
		Approved By: <i>[Signature]</i>	Date:

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PRODUCT SPECIFICATION

1. SCOPE :

This specification covers the 0.5 mm pitch board To board SMT type connector series.

2. PRODUCT NAME AND PART NUMBER :

Product Name	E&T Part Number
0.50mm Board To Board Connector, V/T, SMT Type Male (Lead Free)	1000K-XXXX-XXX

3. RATINGS :

Item	Standard	
Rated Voltage (MAX.)	50 V	AC
Rated Current (MAX.)	0.5A	
Ambient Temperature Range	-40 ⁰ C ~ +85 ⁰ C	

*Including terminal temperature rise

4.PERFORMANCE :

4- 1 Electrical Performance

Item	Test Condition	Requirement
4-1-1 Contact Resistance	Test Current: 100 mA Max. Test Voltage: 20mV Max Test Method: MIL-STD-202F, Method 303	50 mΩ MAX.
4-1-2 Insulation Resistance	Test Voltage: 100VAC. Test Duration: 1 minutes. Test Method: MIL-STD-202, method 302	Initial: 500 MΩ Min
		Final: 100 MΩ Min.
4-1-3 Dielectric Strength	Test Voltage: 200V AC. Test Time: 60 sec. Test Method: MIL-STD-202, Method 301.	No Breakdown

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4-2 Mechanical Performance

Item		Test Condition	Requirement	
4-2-1	Insertion Force And Withdrawal Force	Test Speed: 25±3 mm/min. Test Method: MIL-STD-1344A, Method 2016.	Insertion Force Max : 0.09kgf X total terminals	
			Withdrawal Force(Min): 0.01kgf X total terminals	
4-2-2	Terminal / Housing Retention Force	Test Speed: 25mm/min.	0.5kgf (Min)	
4-2-3	Durability	The contacts of connector shall be subject to 50 cycles of mating and unmating.	Contact Resistance	
			Initial Value	≤ 50 mΩ
			Final Value	≤ 70 mΩ

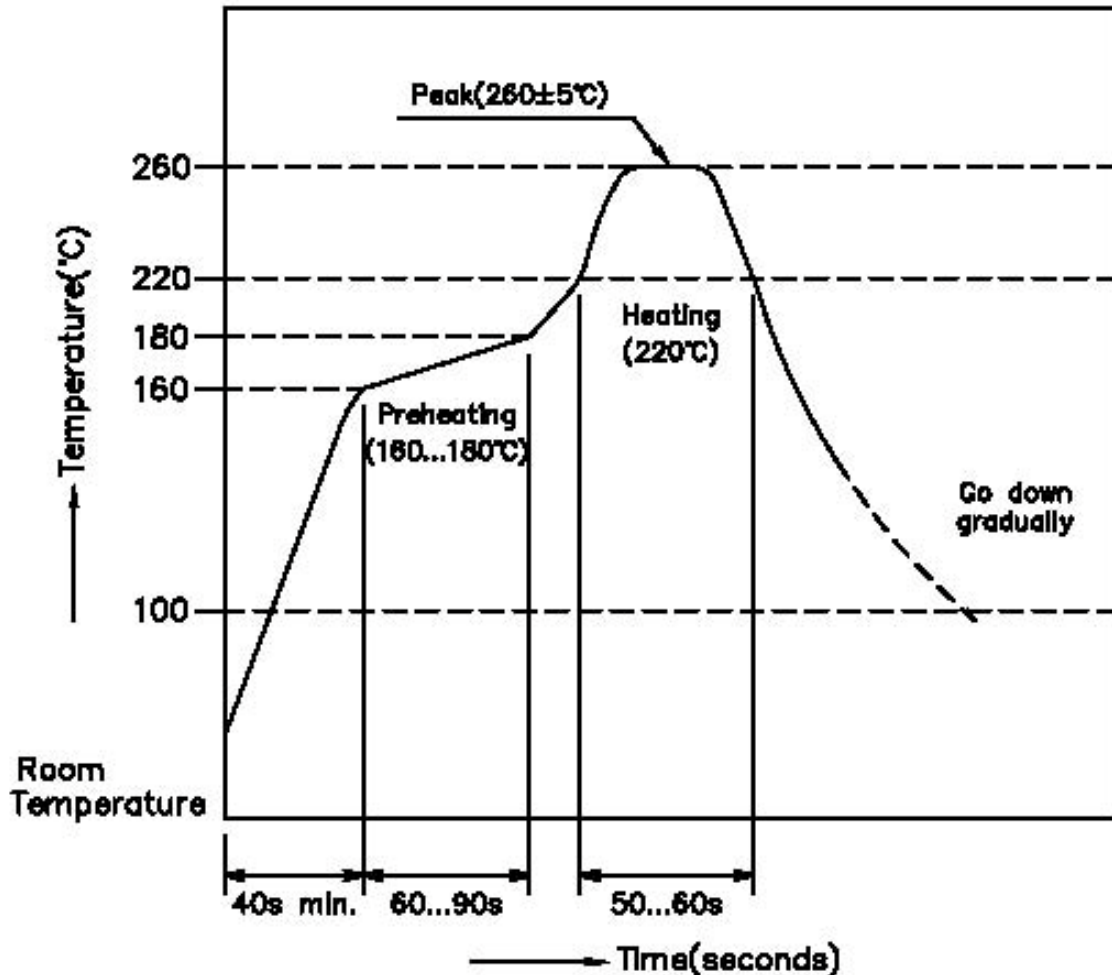
4-3 Environmental Performance and Others

Item		Test Condition	Requirement	
4-3-1	Vibration	Amplitude : 1.5 mm Frequency range: 10~55~10 Hz in 1 minute Duration: 2 hours in each X.Y.Z axes Current: 100mA. Test Method: MIL-STD-202F, Method 201	Appearance	No Damage
			Contact Resistance	≤ 70 mΩ
			Discontinuity	1μsec
4-3-2	Heat Resistance	Temperature: 80±2℃ Duration: 96 hours Test Method: MIL-STD-202, Method 108.	Appearance	No Damage
			Contact Resistance	≤ 70 mΩ
4-3-3	Cold Resistance	Temperature: -40±2℃ Duration: 96 hours Test Method: JIS C60068-2-1	Appearance	No Damage
			Contact Resistance	≤ 70 mΩ
4-3-4	Humidity	Temperature: 40±2℃ Relative Humidity: 90~95% Duration: 96 hours Test Method: MIL-STD-202F , Method 103	Appearance	No Damage
			Contact Resistance	≤ 70 mΩ
			Insulation Resistance	≥ 100MΩ
			Dielectric Strength	Must meet 4-1-3

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INFRARED REFLOW CONDITION

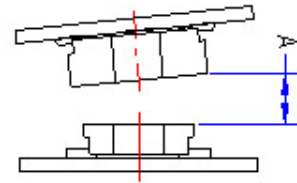
- 1) Ascending time to preheating temperature 170°C shall be 40 seconds minimum.
- 2) Preheating shall be fixed at 160...180°C for 60...90 seconds.
- 3) Heating shall be fixed at 220°C for 50...60 seconds.
- 4) At $260\pm 5^\circ\text{C}$ peak shall be 10 seconds maximum.



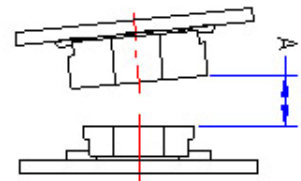
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Precaution in the connector handing.

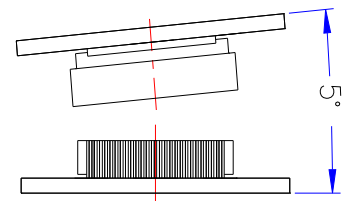
1. Please try that the connector parallel is mated is mated
Into or unmated form the counterpart connector
in parallel.



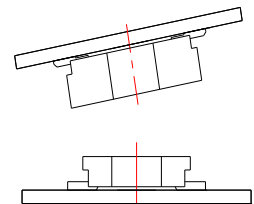
2. Mating (into the counterpart connector)
At the time of mating please do not continue to mate the
connector if there is the gap.
A to the one side, please mate the connectors when the both
guides are guided.



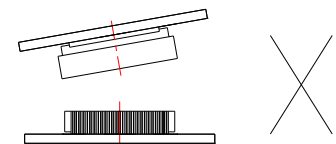
-  When mating plug with receptacle obliquely ,please make
mating within an angle of 5° .



3. Unmating (from the counterpart connector)
Please do not extract the one side of the printed circuit board.
Please extract the printed circuit board in parallel with the
connector.



4. Please do not bend the printed circuit board in the arrow
direction.



5. After mating connectors , fix the PCB/PWB in order not for them to disengage.

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RELEASE HISTORY

Rev.	Revisions	Date	Executor	Description
A2	REN111210	DEC-14-2011	Max	Cancel Packaging Spec
A3	RE201112005	DEC-22-2011	Max	1000K-XXXX-XXX change 1000K-XXXX-X1,X2,X5,X6,X7X