TO

SPECIFICATION FOR APPROVAL

DESCRIPTION: Pitch 0.50mm LVDS CONNECTOR

CUSTOMER PROD.NO/DWG.NO:

E&T PROD.NO: 0870K-XXXX-XXX

APPROVAL SHEET NO:

E&T DWG. NO./DOCUMENT: 0870K-XXXX-XXX

REV: **A2**

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

APPROVED SIGNATURES			

®

The Quality Connection

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 LVDS CONNECTOR

RE201305023		**Title: Pitch 0.50mm LVDS Connector**	
A2	2015/4/14	This Document Contains Information That Is Proprietary To E&T And Should Not Be Used Without Written Permission	
Rev	**Description**		
Document No. 0870K-XXXX-XXX		Prepared By: Juno Chen	Date: 02/08/10'
		Checked By:	Date:
		Approved By:	Date: 04.14.2015'

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GROUP AND TEST SEQUENCE

Test of Examination		Test Group										
		A	B	C	D	E	F	G	H	I	J	
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	Durability		4									
7	Vibration			3								
8	Heat Resistance				3							
9	Cold Resistance					3						
10	Humidity	5										
11	Solder Ability						2					
12	Resistance To Soldering Heat							2				
13	Salt Spray									3		
14	Temperature Cycling										3	

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PRODUCT SPECIFICATION

1. SCOPE :

This specification covers the0.50 mm pitch LVDS connector series.

2. PRODUCT NAME AND PART NUMBER :

Product Name	E&T Part Number
0.50mm LVDS Connector	0870K-XXXX-XXX

3. RATINGS :

Item	Standard	
Rated Voltage (MAX.)	50 V	AC/DC
Rated Current (M.)	0.3 A	
Ambient Temperature Range	-40^0C ~ $+85^0$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: 100 mA Max. Test Voltage: 20mV Max Test Method: EIA364-23	Initial Value	80 mΩ Max.
			Final Value	100 mΩ Max.
4-1-2	Insulation Resistance	Test Voltage: 250V DC. Test Duration: 1 minutes. Test Method: EIA364-21	100 MΩ Min.	
4-1-3	Dielectric Strength	Test Voltage: 150 V AC. Test Time: 60 sec. Test Method:EIA364-20, Method B.	No Breakdown	

4-2 Mechanical Performance

Item		Test Condition	Requirement	
4-2-1	Insertion Force	Test Speed: 12.5 mm/min. Test Method: EIA364-13B, Method B	{ 0.0625kgf } MAX. (PER PIN)	
	Removal Force	Test Speed: 12.5 mm/min. Test Method: EIA364-13B, Method B	{ 0.0175kgf } MIN. (PER PIN)	
4-2-2	Durability	The contacts of connector shall be subject to 30 cycles of mating and unmating.	Contact Resistance	
			Initial Value	≦ 80 mΩ
			Final Value	≦100 mΩ

4-3 Environmental Performance and Others

Item		Test Condition	Requirement	
4-3-1	Vibration	Amplitude : 1.5 ㎜ 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	≦80 mΩ
			Discontinuity	1μsec
4-3-2	Heat Resistance	Temperature: 85±3℃ Duration: 96 hours Test Method: MIL-STD-202, Method 108.	Appearance	No Damage
			Contact Resistance	≦80 mΩ
4-3-3	Cold Resistance	Temperature: -40±2℃ Duration: 96 hours Test Method: JIS C60068-2-1	Appearance	No Damage
			Contact Resistance	≦ 80 mΩ
4-3-4	Humidity	Temperature: 40±2℃ Relative Humidity: 90~95% Duration: 96 hours Test Method: EIA364-31 , Method A	Appearance	No Damage
			Contact Resistance	≦80 mΩ
			Insulation Resistance	≧100MΩ
			Dielectric Strength	Must meet 4-1-3
4-3-5	Solder Ability	Soldering Time : 3±0.5 sec Solder Temperature : 245±5℃ Test Method: MIL-STD-202F , Method 208G	Solder Wetting	95% Of Immersed Area Must Show No Voids, Pin Holes

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Item		Test Condition	Requirement	
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
4-3-7	Salt Spray	Chamber Temperature : 35±2℃ Air Tank Temperature : 47±1℃ Salt Solution：5 ± 0.5% Duration : 48 hours Test Method: EIA364-26 , Method B	Appearance	No Damage
			Contact Resistance	≦ 80 mΩ
4-3-8	Temperature Cycling	5 cycles of : a) - 55 ±3℃ 30 minutes b) +25 ±3℃ 30 minutes c)+ 85 ±2℃ 30 minutes Test Method: EIA364-31, Method I	Appearance	No Damage
			Contact Resistance	≦ 80 mΩ

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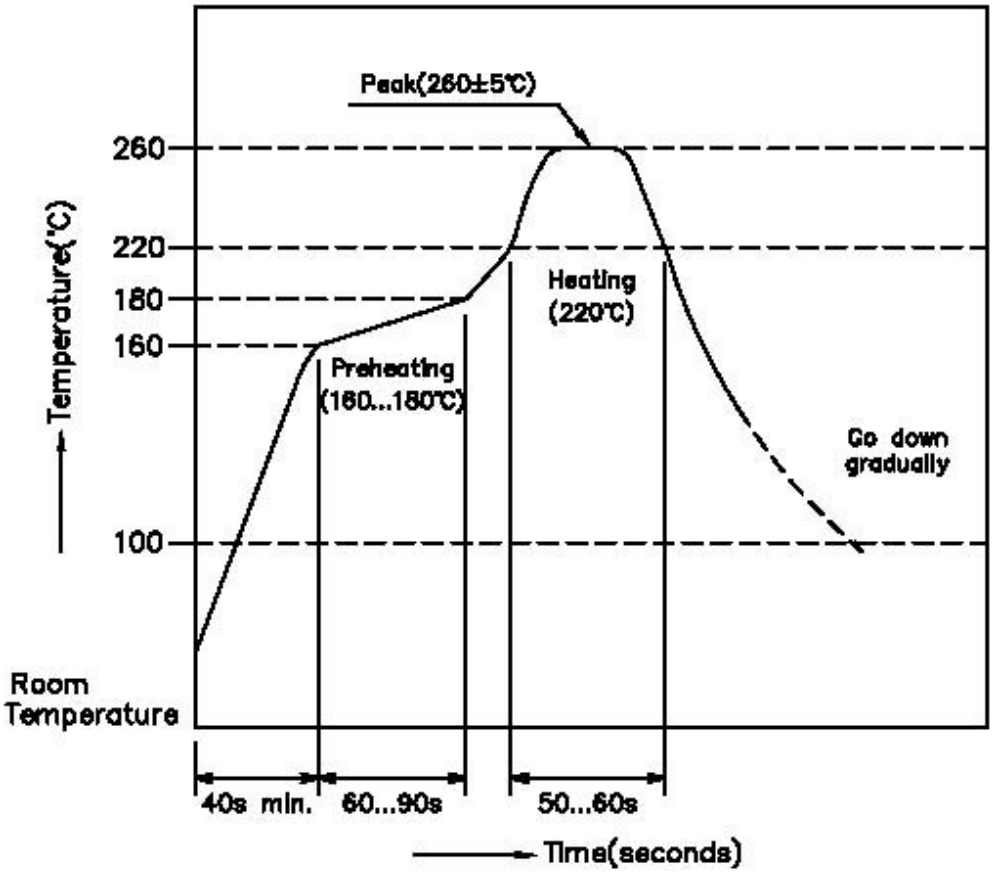
INFRARED REFLOW CONDITION

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



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RELEASE HISTORY

Rev.	Revisions	Date	Executor	Description
A2	RE201305023	APR-14-2015	Juno	Change UL