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## **SPECIFICATION FOR APPROVAL**

DESCRIPTION: Pitch 2.50mm Battery Connector

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CUSTOMER PROD.NO/DWG.NO:

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E&T PROD.NO: 8950K-XXXXN-00,20X

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APPROVAL SHEET NO:

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E&T DWG. NO./DOCUMENT: 8950K-XXXN-00,20X

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REV: A1

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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.  
E&T ELECTRONICS (NANKEEN) CO., LTD.**

# ENTERY INDUSTRIAL CO., LTD.

**Title :Pitch 2.50mm Battery Connector**

## RELEASE HISTORY

**Title: Pitch 2.50mm Battery Connector**

A1	2012/10/23
Rev	Description

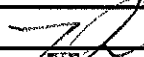
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Document No.


8950K-XXXN-00,20X

Prepared By: Hill Chang

Date: 11,25'2008

Checked By: 

Date: 12,03,2012

Approved By: 

Date:

# ENTERY INDUSTRIAL CO., LTD.

## TEST SEQUENCES IDENTIFICATION

Test of description		Test Group (a)								
		A	B	C	D	E	F	G	H	
		Test Sequence								
1	Examination of Product	1,7	1,9	1,9	1,5	1,5	1,3	1,3		
2	Contact Resistance	3,6	2,6	2,6	2,4	2,4				
3	Dielectric Withstanding Voltage		4,8	4,8						
4	Insulation Resistance		3,7	3,7						
5	Mating Force	2,5								
6	Durability	4								
7	Retention Force								1	
8	Humidity		5							
9	Thermal Shock			5						
10	Salt Spray				3					
11	Temperature Life					3				
12	Solder ability						2			
13	Soldering Heat withstanding							2		

(a)Numbers indicate sequence in which tests are performed.



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- ORDERING INFORMATION
- PLASTIC MATERIAL CERTIFICATE
- CONTACTS MATERIAL CERTIFICATE
- ENGINEERING DRAWING OF PRODUCTS

# ENTERY INDUSTRIAL CO., LTD.

## SPECIFICATION OF PRODUCTS

### 1. Scope

This product specification contains the test method, the general performance and requirement for interconnection system connectors. The specification covers 8950 series connectors manufactured by ENTERY INDUSTRIAL CO., LTD.

### 2. Construction and physical dimensions shall be same as specified by drawings

### 3. Characteristics

Voltage rating: 25V DC

Current rating: 2Amps/Contact

Operating temperature: -40°C to +85°C

Storage temperature : -40°C to +85°C

### 4. Mechanical performance

Item	Description	Test method & Condition	Requirement
4-1	Mating force	Load is conducted between applicable component  (battery seat) with in the 100 cycles of mating and unmating. (Travel=1.4mm)	100gf×n Min (n=No of contact)
4-2	Durability	It should be tested in accordance with method 2016 of MIL-STD-1344A.The contacts of connector shall be subject to 10000 cycles of mating and unmating. (Travel=1.4mm)	No defect Contact resistance shall be 50 mΩ or less after 10000 cycles of engagement
4-3	Retention force	It should be tested in accordance with method 2007.1 of MIL-STD-1344A.The end of terminal shall be pulled in a perpendicular to base housing at a constant speed of 25mm/minute.	4.4N(0.45kgf) Min

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### 5. Electrical performance

Item	Description	Test method & Condition	Requirement
5-1	Contact resistance	It should be tested in accordance With method 3002.1 of MIL-STD-1344A. Measure by low level (Max:20mV, 100mA)	Initial: 30 mΩ Max Final: 50 mΩ Max
5-2	Insulation resistance	It should be tested in accordance With method 3003.1 of MIL-STD-1344A. When 100V DC is applied between adjacent contacts and insulation resistance is measured with in one minute.	1000 MΩ Min.
5-3	Dielectric withstanding voltage	The connector shall be tested in Accordance with method 3001.1 of MIL-STD-1344A. When the 500V AC r.m.s for one minute applied between adjacent contacts.	There shall be no current leakage and flashover or damage detected

### 6. Environmental performance

Item	Description	Test method & Condition	Requirement
6-1	Humidity	The unmated connector shall be Tested in accordance with method 1002.2 of MIL-STD-134A test procedure type I condition B . Temperature: 40±2Humidity:90-95 % (RH) Duration:96 hours.	No damage. Contact resistance shall be less than 50 mΩ and insulation resistance shall be more than 1000 MΩ after the test
6-2	Thermal shock	Connector shall be tested in accordance with method 1003.1 of MIL—STD-202F condition A.-40℃ (30 minute)→+25℃ (5 minute) →+85℃ (30 minute) consecutive 5 cycles.	No damage. Electrical and mechanical Performance specifications should be satisfied.

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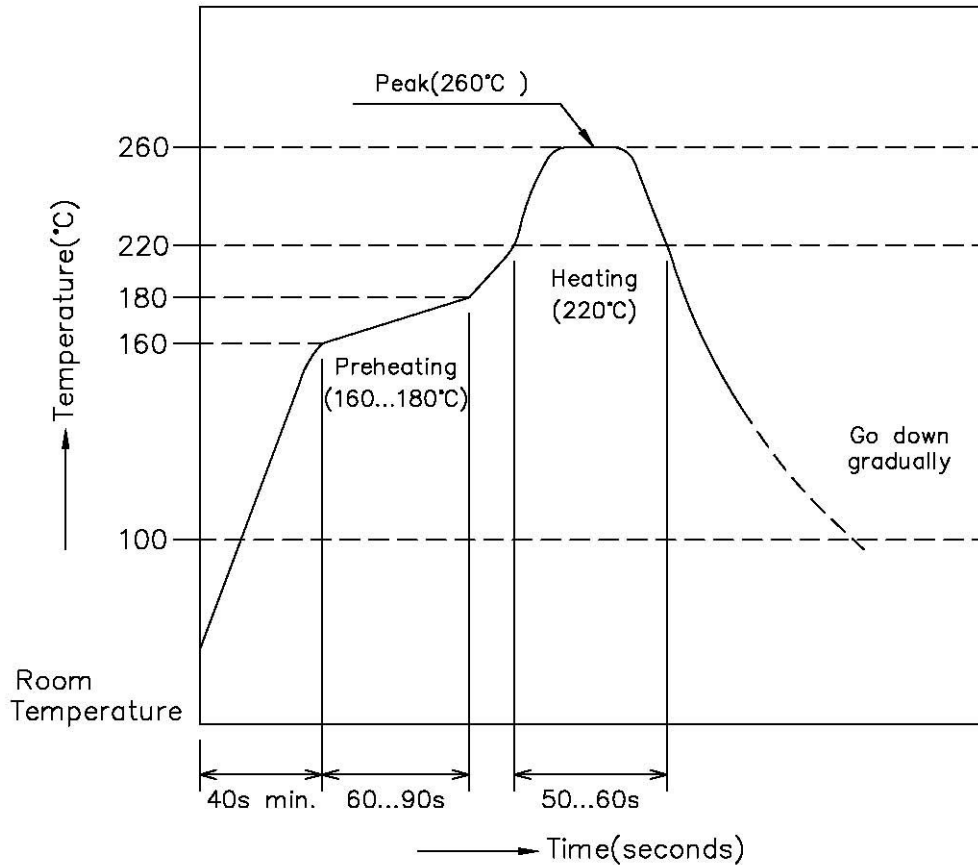
Item	Description	Test method & Condition	Requirement
6-3	Salt spray	Connector shall be tested in accordance with method 100.1 of MIL-STD-1344A condition B. Temperature: $35 \pm 2^{\circ}\text{C}$ Density: 5% in weight Duration: 48 hours	No damage. Contact resistance shall be less than $50\text{ m}\Omega$ after the test.
6-4	Temperature life	It should be tested in accordance with method 1005.1 of MIL-STD-1344A. The tested temperature: $85 \pm 2^{\circ}\text{C}$ for 96 hours.	Contact resistance shall be less than $50\text{ m}\Omega$ .
6-5	Solder ability	The end of post shall be dipped in accordance with method 208F of MIL-STD-202F. Soldering temperature: $245 \pm 5^{\circ}\text{C}$ Soldering time: $3 \pm 0.5\text{ sec}$	More than 95% of the immersion shall be covered with solder
6-6	Soldering heat withstanding	It should be tested in accordance with method test condition K of MIL-STD-202F. Soldering temperature: $260 \pm 5^{\circ}\text{C}$ . Duration time: $10 \pm 5\text{ sec}$ .	Inspect dimension During the test, no physical damage



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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.



# **ENTERY INDUSTRIAL CO., LTD.**

## **ORDERING INFORMATION**

### **2.50mm Pitch 8950 Series Connectors**

8950 series connectors are designed for board to battery seat and pitch 2.50mm(0.098") contact spacing SMT power row versions available.

They are used in mobile phone and other consumer applications. Where Reduced space is requirement.

### **FEATURES :**

- It is approved to 10000 cycles of mating and unmating.
- A compact design for reduced space.

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### RELEASE HISTORY

Rev.	Revisions	Date	Executor	Description
A1	RE201206014 RE201210002	OCT-23-2012	JIMMY	UPDATE MATERIAL