

1. SCOPE

This product specification defines the product performance and the test methods to ascertain the performance of the (0.635mm Board to Board)Connector ,which si designed and manufactured by JILN Electronic Co. ,Ltd.This product specification is applicable but not only for those part numbers which be shown in the cover page.

本產品規格書規定了由錦凌電子有限公司設計生產的（0.635mm BTB）型連接器，產品的特性及測試方法。本產品規格書適用於但不局限于封面所顯示的產品料號

2. REFERENCE DOCUMENTS

MIL-STD-1344	Test method for electrical connector 電子連接器測試方法
MIL-STD-202	Test method for electrical connectors 電子零件測試方法
EIA364	Test method for electrical connectors 電子零件測試方法
JIS C 0051	Test method for electrical connectors 電子零件測試方法
MIL-G-45204C	Speci fication for gold plating 鍍金規格
IEC-512-3	IEC standard for current carrying capacity tests IEC 電流測試標準
QQ-N-290A	Speci fication for nickel plating 鍍鎳規格
MIL-P-81728A	Speci fication for tin/lead plating 鍍錫鉛規格
MIL-T-10727B	Speci fication for tin plating 鍍錫規格
UL498	UL standard for safety of attachment plug ang receptacle UL安規要求標準
IEC62321	Determination of total lead &cadmium content 總鉛和總鎘含量測定
IEC62321	Determination of total lead &cadmium content 總鉛和總鎘含量測定
IEC62321	Determination of heavy metals content 重金屬含量測定
IEC62321	Determination of total lead &cadmium content 總鉛和總鎘含量測定

3. FEATURE &DIMENSIONS

3.1. PRODUCT DIMENSION 產品尺寸

These connectors shall have the dimensions as shown in drawing.

本產品的相關尺寸參見圖面

3.2. PCB/panel layout 印刷電路板布局

The recommended PCB layout is shown in drawing.

本產品適用的 PCB layout 參見圖面。

3.3. BILL OF MATERIAL材料清單

Harmful material controlling follows the requirements of RoHS. The bill of material is described in drawing.

有害物質控制符合RoHS指令要求。本產品適用的材料參見圖面。

3.4. MECHANICAL & ELECTRICAL CHARACTERISTIC 機械及電器特性

The connector shall have the mechanical and electrical performance as described in drawing.

本產品的機械及電器特性參見下方附表一（测试要求与方法）。

3.5. PACKAGING 包裝

Products shall be packaged according to requirements specified in purchase order for safe delivery, connector container and the packaging method are shown in package specification.

產品可依照客戶指定要求包裝，包裝材料與包裝方式參見產品包裝規範。

3.6. RATING CURRENT AND RATING VOLTAGE 額定電流與額定電壓

Rating current is (0.5)A, rating voltage is (50)V DC/AC RMS.

額定電流 (0.5) A, 額定電壓 (50) V DC/AC RMS.

3.7. STORAGE AND OPERATING TEMPERATURE 存儲與使用溫度

Temperature range: $-(40)^{\circ}\text{C}\sim+(105)^{\circ}\text{C}$, including terminal temperature rise for rating current.

溫度範圍: $-(40)^{\circ}\text{C}\sim+(105)^{\circ}\text{C}$, 包含接觸端子的額定電流溫升

4. Environmental

4.1. SOLDERABILITY 可焊性

Connectors meet solder-ability to MIL-STD-202, and shall be free of contaminants.

產品可焊性符合MIL-STD-202標準規定的相關要求，表面不得有污染物。

4.2. RESISTANCE TO SOLDER HEAT 耐焊接熱

4.2.1. WAVE SOLDER 波峰焊接

Each cycle consists of three consecutive phases.

每個焊接周期包括三個連續階段。

4.2.1.1. Preheat 預熱

The steady temperature of the preheat zone is $90\sim 125^{\circ}\text{C}$

預熱區最終溫度控制在 $90\sim 125^{\circ}\text{C}$

4.2.1.2. Soldering 焊接

To avoid the secondary tin-melting, the temperature on PCB upper surface is 160°C Max. for products with lead, or 200°C Max. for lead-free products. The temperature of the PCB bottom surface shall not be exceed 100°C more than the temperature of the PCB upper surface. The peak temperature is during $230\sim 255^{\circ}\text{C}$ for products with lead, or $255\sim 270^{\circ}\text{C}$ for lead-free products. The tin dip time is duration for $3\sim 10$ seconds.

有鉛產品板面溫度不得超過 160°C ，無鉛產品板面溫度不得超過 200°C ，以防止貼片零件二次熔錫。板面溫度與板底的溫度溫差不得超過 100°C 。板下溫度峰值有鉛產品維持在 $230\sim 250^{\circ}\text{C}$ ，無鉛產品控制在 $255\sim 270^{\circ}\text{C}$ 。浸錫時間控制在 $3\sim 10$ 秒。

4.2.1.3. Cool Down冷卻

Cool down shall not exceed 6°C per second.

冷卻速度不超過6°C秒

Note:

Device temperature measurements are referenced from the top-center of the package outer surface

設備溫度量測時以從頂部中間位置測量為準.

5. PERFORMANCE AND TEST DESCRIPTION

5.1. REQUIREMENT 要求

Product is designed to meet electrical, mechanical, and environmental performance requirements specified in Table 1

本產品設計符合附表一所列的機械，電器及環境要求

5.2. TEST CONDITION 測試條件

Unless otherwise specified, all tests shall be performed at ambient environmental conditions.

除非特別說明，所有測試的溫度條件下。

5.3. SAMPLE SELECTION 樣品選擇

Test samples shall be selected at random from current production. Test samples shall be reused. Samples are pre-conditioned with 10 cycles of durability. Each group shall be containing 5 test samples at least.

測試樣品從生產的產品中隨機抽取，所有測試過的樣品不得重複使用。樣品以預先進行10次，每組測試有5個樣品。

Table 1: Test Requirements and Methods

附表一：測試要求與方法

Items	Requirements	Test Methods
	要求	測試方法
1 Confirmation of Product 產品確認	Product shall be conforming to the requirements of applicable product drawing 產品符合相關產品圖面的要求	Visually dimensions and functionally inspected per applicable product drawing. 依照產品相關圖面，產品的尺寸及

2 Contact Resistance
接觸

30 m Max. Initial
最 30 m

3 Insulation Resistance

500 M Min
最 500 M

4 Dielectric Withstanding Voltage
耐電壓



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<p>9 Salt Spray</p>	<p>After testing, no damage, contact resistance 35 m Max. Dielectric Strength should be OK, Insulation Resistance should be 500 M Min.</p> <p>測試 產品無 , 接觸 最 35 m 耐電壓測試 OK, 最 500 M .</p>	<p>5 1% salt concentration 12 hours 35 2°C MIL-STD-202, Method 101, condition B. 端子 度5 1%, 時間12 時, 溫度35 2°C. 適用: MIL-STD-202, 方法101, 條件B</p>
<p>10 Humidity (Stead State) 濕</p>	<p>After testing, no damage, contact Resistance 35 m Max. Dielectric Strength should be OK, Insulation Resistance should be 500 M Min.</p> <p>產品測試 無 , 接觸 最 35 m 耐電壓測試 OK, 最 500 M</p>	<p>Temperature: 40 2°C Relative Humidity: 90-95%. Duration: 96 Hours MIL-STD-202, Method 103, condition B. 溫度: 40 2°C. 相 度: 90-95%. 持續時間: 96 時. 適用: MIL-STD-202, 方法103, 條件B.</p>

6.

- 1) 物料的包 物料有一定的 用和 封 用, 物料在 中不 。
- 2)包 防 , 防 防 和防 要求。
- 3)最 包 的 有 品型 物料 和 量。
- 4)包 的 品, 在 境 度 -10°C~+40°C, 相 度在80%以下, 周 中 性, 性 性 的 存, 在 件下, 生 期 存期, 在 物料 合格品。