



喬訊電子工業股份有限公司
CHYAO SHIUNN ELECTRONIC INDUSTRIAL LTD.
7FL., NO.17, LANE 3, SEC.1 CHUNG CHENG EAST RD.,
TAMSHUI, TAIPEI, TAIWAN, R.O.C.
TEL: 886-2-2629-9955 (REP) FAX: 886-2-2626-6677



<http://www.chyaoshiunn.com.tw> E-mail: cs@chyaoshiunn.com.tw

Type Document	Product Specification	Revised /Edition	F
Date Issued	2013/10/16	Data Revised	2017/01/24
Subject: JS-1178A JS-1178E JS-1183V JS-1400SM Pitch: 1.27mm Double-row SMT Series Board to Board Connector			Issued By: Engineering Dept.

*This specification is referred to the 1.27mm
Double-row SMT series board to board connector.
本規格書內容係提供 1.27 mm 雙排 SMT 系列產品之相關參考，
其用途為電路板端相接於電路板端之連接器*

-INDEX-

- 1.0 Product Name/Part Number & Drawing Number.
(產品名稱 / 產品型號及圖面型號)
- 2.0 Construction/Dimensions/Material & Surface Finish.
(材質以及表面鍍層)
- 3.0 Characteristic.
(產品特性)
- 4.0 Specimen.
(樣本圖示)
- 5.0 Applicable Standards.
(適用規範)
- 6.0 Mechanical Performance.
(機械性能)
- 7.0 Electrical Performance.
(電氣性能)
- 8.0 Environmental Performance.
(環境性能)
- 9.0 Remark (備註).



喬訊電子工業股份有限公司
 CHYAO SHIUNN ELECTRONIC INDUSTRIAL LTD.
 7FL., NO.17, LANE 3, SEC.1 CHUNG CHENG EAST RD.,
 TAMSHUI, TAIPEI, TAIWAN, R.O.C.
 TEL: 886-2-2629-9955 (REP) FAX: 886-2-2626-6677



http://www.chyaoshiunn.com.tw E-mail:cs@chyaoshiunn.com.tw

Type Document	Product Specification	Revised /Edition	F
Date Issued	2013/10/16	Data Revised	2017/01/24
Subject: JS-1178A JS-1178E JS-1183V JS-1400SM Pitch: 1.27mm Double-row SMT Series Board to Board Connector			Issued By: Engineering Dept.

1.0 Product Name/Part Number & Drawing Number(產品名稱 / 產品型號及圖面型號):

Product Name(產品名稱)	Part Numbe(零件型號)	Drawing Number(圖面型號)	
Pin Header	Straight(直立式)	JS-1178A-XX	JS-1178A-XX
		JS-1178E-XX	JS-1178E-XX
		JS-1400SM-XX	JS-1400SM-XX
Female header	Straight(直立式)	JS-1183V-XX	JS-1183V-XX

Note: (xx) The number of the circuits. In this series the kink with post is standard.

2.0 Construction/Dimensions/Material & Surface Finish(材質以及表面鍍層):

Part Name(零件名稱)	Material(材質)	Surface Finish(表面鍍層)	
Pin Header (排針) (電路板端連接器)	Square Pin (方型導體)	Brass	Gold -Plated
	Base (膠座)	LCP	UL 94V-0
	Cap (蓋子)	PA9T	UL 94V-0
Female header (母座) (電路板端連接器)	Contact (導體)	copper alloy	Gold -Plated
	Base (膠座)/ Cap (蓋子)	LCP	UL 94V-0

3.0 Characteristic(產品特性):

Item(項目)	Standard(標準規範)
3.1 額定電流 Rated Current	1A AC/DC
3.2 額定電壓 Rated voltage:	30V AC.
3.3 Ambient Temperature Range 環境與操作溫度範圍	(操作使用溫度範圍) Operating Temp.: (Insulator Nylon 9T & LCP V-0: -25~+105) ; Including 30°C Terminal Temperature Rise at rated Current , (包括定額電流內, 端子所產生 30°C 以下溫昇) (置存於環境當中溫度範圍) Non-Operating Temp. : (Insulator Nylon 9T & LCP V-0: -25~+105) ;
3.4 Applicable Printed Circuit Board Layout 適用電路板佈局設計	3.4.1 (電路板厚度)Thickness: 0.8 mm ~ 1.6 mm
	3.4.2 (孔外徑) Hole Size: 1.05±0.05 mm (female header) (孔外徑) Hole Size: 1.00±0.05 mm ; 1.40±0.05 mm (male header)
	3.4.3 SMT Layout: 1.27±0.05 mm per Pitch
	3.4.4 SMT Layout: 0.76X2.40±0.05 mm for pin post (female header) SMT Layout: 0.75X1.80±0.05 mm for pin post (male header)



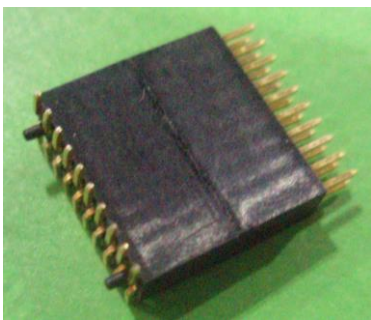

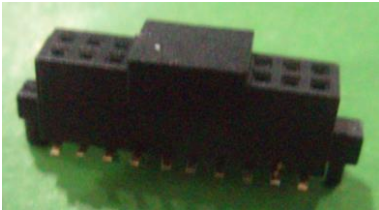

喬訊電子工業股份有限公司
CHYAO SHIUNN ELECTRONIC INDUSTRIAL LTD.
 7FL., NO.17, LANE 3, SEC.1 CHUNG CHENG EAST RD.,
 TAMSHUI, TAIPEI, TAIWAN, R.O.C.
 TEL: 886-2-2629-9955 (REP) FAX: 886-2-2626-6677



<http://www.chyaoshiunn.com.tw> E-mail: cs@chyaoshiunn.com.tw

Type Document	Product Specification	Revised /Edition	F
Date Issued	2013/10/16	Data Revised	2017/01/24
Subject: JS-1178A JS-1178E JS-1183V JS-1400SM Pitch: 1.27mm Double-row SMT Series Board to Board Connector			Issued By: Engineering Dept.

4.0 Specimen(樣本圖示) :

Part Name / Part Number/ Picture or Photograph 零件名稱 / 零件型號 / 樣本圖示			
Pin Header JS-1178A-XX		Pin Header JS-1178E-XX	
Female header JS-1183V-XX		Pin Header JS-1400SM-XX	

5.0 Applicable Standards(適用規範):

MIL-STD-202 Testing method for electronic connectors used in electronic equipment.

連接器使用於電器產品，所適用之 MIL-STD-202 測試規範

EIA 364 Testing method for electrical connectors. 電子連接器，所適用之 EIA 364 測試規範

6.0 Mechanical Performance(機械性能):

Item(項目)	Test Condition(測試條件)	Requirement (規格)
6.1 Insertion & Withdrawal Force 嵌入力與脫拔力	Insert and withdraw with connectors at the speed rate of 25 ± 6 mm /minute. (EIA 364-13) Male header 與 Female header 兩端互配， 以每一分鐘 25 ± 6 mm 的速率，作嵌入與脫拔之往返測試	單一接觸點 Per Contact Insertion Force: 嵌入力最大容許值 0.2 kgf/Max. Withdrawal Force: 拔出力最小容許值 0.015 kgf/Min.
6.2 Terminal Retention Force (in Housing) 导体 與 Housing 之間脫拔力	Axial pullout force on the square pin in the base at the speed rate of 25 ± 6 mm per minute. 對於已經存在於膠座當中方形針， 施以每一分鐘 25 ± 6 mm 速率之軸向脫拔力	單一接觸點 Per Contact 最小容許值 0.2kgf/Min.



喬訊電子工業股份有限公司
 CHYAO SHIUNN ELECTRONIC INDUSTRIAL LTD.
 7FL., NO.17, LANE 3, SEC.1 CHUNG CHENG EAST RD.,
 TAMSHUI, TAIPEI, TAIWAN, R.O.C.
 TEL: 886-2-2629-9955 (REP) FAX: 886-2-2626-6677



http://www.chyaoshiunn.com.tw E-mail:cs@chyaoshiunn.com.tw

Type Document	Product Specification	Revised /Edition	F
Date Issued	2013/10/16	Data Revised	2017/01/24
Subject: JS-1178A JS-1178E JS-1183V JS-1400SM Pitch: 1.27mm Double-row SMT Series Board to Board Connector			Issued By: Engineering Dept.

Item(項目)	Test Condition(測試條件)	Requirement (規格)
6.3 Square Pin Retention Force (in Base) 方型針與膠座之間脫拔力	Axial pullout force on the square pin in the base at the speed rate of 25 ± 6 mm per minute. 對於已經存在於膠座當中方型針，施以每一分鐘25 ± 6 mm速率之軸向脫拔力	單一接觸點 Per Contact 最小容許值 0.4kgf/Min.

7.0 Electrical Performance(電氣性能) :

Item(項目)	Test Condition(測試條件)	Requirement(規格)
7.1 Contact Resistance 接觸阻抗	A maximum voltage of 20mV and a maximum current of 100mA are applied to the Mate connector. (EIA 364-23) 對組合狀態下連接器，於其兩端施以最大電壓 20mV 以及最大電流 100mA	Contact Resistance: 20 milliohms Max. 最大容許值. 20m 歐姆
7.2 Current Continuity 電流連續性	Each circuit of the connector shall be connected in series continuity meter shall detect current discontinuity longer than 1 microsecond during the vibration test. 振動試驗過程中，將連接器的每個電路逐一串聯，並持續量測其電流是否存在不連續性(斷電)，且時間超過 1 微秒	No discontinuity current is longer than 1 micro second. 電流中斷現象，時間不可多於 1 微秒
7.3 Insulation Resistance 絕緣阻抗	Apply 500V D/C to any two adjacent contacts to measure the insulation resistance. (EIA 364-21) 對相鄰之兩接觸導體，各施以 500V D/C 電壓以量測其間之絕緣阻抗值	Insulation Resistance: Initial 1000 megohms Min 最初容許值. 1000M 歐姆
7.4 Withstanding Voltage 耐電壓	Apply 1000V A/C (rms) for 1 minute and the leakage current shall not exceed 0.5mA to the adjacent terminal and ground of the Mate connectors. (EIA 364-20) 對組合狀態下之連接器，於其相鄰兩導體之末端各施以電壓 1000V A/C(實效值) 時間 1 分鐘，且漏電流必須小於 0.5mA(毫安培)	No breakdown or flashover. 無損毀或者產生火花



喬訊電子工業股份有限公司
CHYAO SHIUNN ELECTRONIC INDUSTRIAL LTD.
 7FL., NO.17, LANE 3, SEC.1 CHUNG CHENG EAST RD.,
 TAMSHUI, TAIPEI, TAIWAN, R.O.C.
 TEL: 886-2-2629-9955 (REP) FAX: 886-2-2626-6677



<http://www.chyaoashiunn.com.tw> E-mail: cs@chyaoashiunn.com.tw

Type Document	Product Specification	Revised /Edition	F
Date Issued	2013/10/16	Data Revised	2017/01/24
Subject: JS-1178A JS-1178E JS-1183V JS-1400SM Pitch: 1.27mm Double-row SMT Series Board to Board Connector			Issued By: Engineering Dept.

8.0 Environmental Performance(環境性能) :

Item(項目)	Test Condition(測試條件)	Requirement(規格)
8.1 Vibration 耐振動	<p>A mated connector shall be mounted on a printed Circuit board and subjected to a vibration test of the following conditions. During the test, test current continuity shall be checked. After the test, contact resistance shall be measured.</p> <p>以組合狀態下連接器焊接於電路板作為試驗樣品,依照隨附如下規格要求,進行耐振動試驗, 試驗過程中確認是否產生不連續電流(斷電)現象, 並於試驗過後量測其接觸阻抗。</p> <p>(EIA 364-28A-83 Condition III)</p> <p>Frequency(頻率) : 10~55~10 Hz/minute.</p> <p>Amplitude (振幅) : 1.5 mm P-P</p> <p>Direction (方向) :1. Axis of up and down.上下軸向(Y 軸) 2. Axis of right the left. 左右軸向(X 軸) 3. Axis of front and back.前後軸向(Z 軸)</p> <p>Period(週期) : 2 hours for each direction. (每一個軸向持續 2 小時)</p>	<p>Initial Contact Resistance : 20 milliohms Max. 接觸阻抗最初容許值: 20m 歐姆</p> <p>(After the test) Contact Resistance: 30 milliohms Max. 經耐振動試驗後接觸阻抗 : 最大容許值 30m 歐姆</p> <p>No discontinuity current is longer than 1 microsecond. 電流中斷現象, 時間不可多於 1 微秒</p>



喬訊電子工業股份有限公司
CHYAO SHIUNN ELECTRONIC INDUSTRIAL LTD.
 7FL., NO.17, LANE 3, SEC.1 CHUNG CHENG EAST RD.,
 TAMSHUI, TAIPEI, TAIWAN, R.O.C.
 TEL: 886-2-2629-9955 (REP) FAX: 886-2-2626-6677



<http://www.chyaoshiunn.com.tw> E-mail: cs@chyaoshiunn.com.tw

Type Document	Product Specification	Revised /Edition	F
Date Issued	2013/10/16	Data Revised	2017/01/24
Subject: JS-1178A JS-1178E JS-1183V JS-1400SM			Issued By: Engineering Dept.
Pitch: 1.27mm Double-row SMT Series Board to Board Connector			

Item(項目)		Test Condition(測試條件)	Requirement(規格)
8.2	Humidity (Steady State) 恆溫恆濕	<p>A mated connector shall be placed in a humidity chamber of the following conditions. After the test, the contact resistance, the insulation resistance and the dielectric withstanding voltage shall be measured.</p> <p style="text-align: right;">(EIA 364-31)</p> <p>以組合狀態下之連接器放置於恆定溫度的濕氣空間，依照隨附如下之規格要求，進行恆溫恆濕試驗，並於試驗過後量測其接觸阻抗、絕緣阻抗、以及耐電壓測試。</p> <p>Temperature(溫度): 40±2°C. Relative Humidity(相對濕度): 90%~95% (RH). Period(週期): 96 hours continuously. (持續 96 小時)</p>	<p>(After the test)</p> <p>Contact Resistance: 30 milliohms Max. 經恆溫恆濕試驗後接觸阻抗： 最大容許值. 30m 歐姆</p> <hr/> <p>(After the test)</p> <p>Insulation Resistance : 500 Megohms Min. 經恆溫恆濕試驗後絕緣阻抗： 最小容許值. 500M 歐姆</p> <hr/> <p>(After the test)</p> <p>Withstanding Voltage : No breakdown or flashover 經恆溫恆濕試驗後耐電壓： 無損毀或者產生火花</p>
		8.3	Thermal Shock 冷熱衝擊



喬訊電子工業股份有限公司
 CHYAO SHIUNN ELECTRONIC INDUSTRIAL LTD.
 7FL., NO.17, LANE 3, SEC.1 CHUNG CHENG EAST RD.,
 TAMSHUI, TAIPEI, TAIWAN, R.O.C.
 TEL: 886-2-2629-9955 (REP) FAX: 886-2-2626-6677



<http://www.chyaoshiunn.com.tw> E-mail: cs@chyaoshiunn.com.tw

Type Document	Product Specification	Revised /Edition	F
Date Issued	2013/10/16	Data Revised	2017/01/24
Subject: JS-1178A JS-1178E JS-1183V JS-1400SM			Issued By: Engineering Dept.
Pitch: 1.27mm Double-row SMT Series Board to Board Connector			

Item(項目)		Test Condition(測試條件)	Requirement(規格)
8.4	Thermal Aging 高溫老化試驗	<p>A mated connector shall be placed in a heat oven of the following conditions. After the test, contact resistance shall be measured. (EIA 364-17)</p> <p>以組合狀態下連接器放置於加熱烤箱當中，依照隨附如下規格要求，進行高溫老化試驗，並於試驗過後量測其接觸阻抗。</p> <p>Temperature(溫度): 85±2°C.</p> <p>Period(週期): 96 hours continuously . (持續 96 小時)</p>	<p>Initial Contact Resistance : 20 milliohms Max. 接觸阻抗最初容許值:20m 歐姆</p> <p>(After the test)</p> <p>Contact Resistance : 30 milliohms Max. . 經高溫老化試驗後接觸阻抗 : 最大容許值. 30m 歐姆</p>
8.5	Salt Spray 鹽水噴霧	<p>A mated connector shall be subjected to a Salt Spray test of the following conditions. After the test , the specimen shall be washed with running water and dried naturally before the measurement of contact resistance.</p> <p>以組合狀態下連接器作為試驗樣品，依照隨附如下規格要求，進行鹽水噴霧試驗，試驗過後將樣品用清水沖洗並經過自然風乾，而後量測其接觸阻抗。(EIA 364-26)</p> <p>Density(鹽水密度): 5 % in weight.</p> <p>Temperature(溫度): 35±2°C. Period(週期): 24 hours</p>	<p>Initial Contact Resistance : 20 milliohms Max. 接觸阻抗最初容許值:20m 歐姆</p> <p>(After the test)</p> <p>Contact Resistance: 30 milliohms Max. 經鹽水噴霧試驗後接觸阻抗 : 最大容許值. 30m 歐姆</p>
8.6	Solder Ability 焊錫性	<p>Fluxed soldering section of header shall be dipped in solder of the following conditions. (EIA 364-52)</p> <p>將連接器 pin 針基板嵌入端，接觸熱溶狀錫料，依照隨附如下規格要求，進行焊錫性試驗</p> <p>Solder Temperature (焊錫溫度) : 245 ± 5°C.</p> <p>Immersion Period (沉浸週期) : 3 ±0.5 Seconds</p>	<p>Solder entirely (Tin Plated : 95% / Gold Plated : 75%) of immersed area must show no voids or pinholes. 焊料覆蓋面積必須達到(鍍錫 95% / 鍍金 75%)，而且不能產生 氣孔或空隙</p>



喬訊電子工業股份有限公司
CHYAO SHIUNN ELECTRONIC INDUSTRIAL LTD.
 7FL., NO.17, LANE 3, SEC.1 CHUNG CHENG EAST RD.,
 TAMSHUI, TAIPEI, TAIWAN, R.O.C.
 TEL: 886-2-2629-9955 (REP) FAX: 886-2-2626-6677

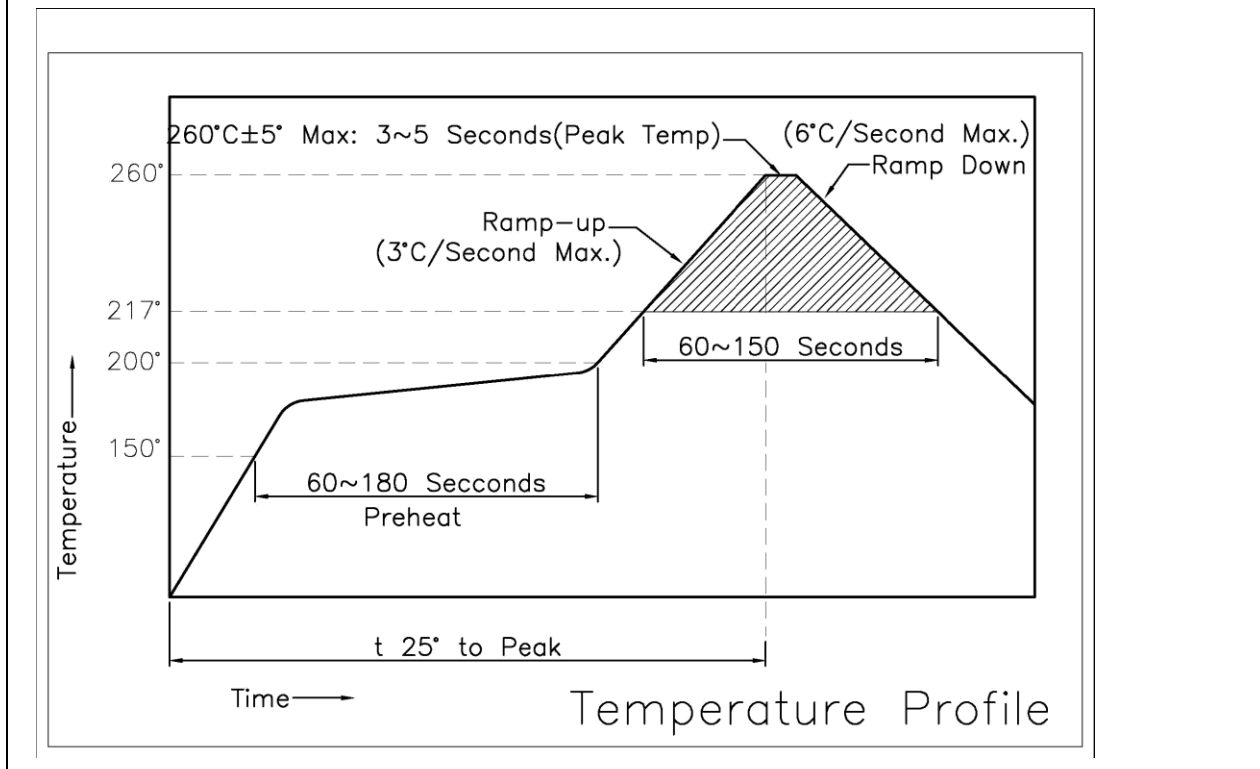


<http://www.chyaoshiunn.com.tw> E-mail: cs@chyaoshiunn.com.tw

Type Document	Product Specification	Revised /Edition	F
Date Issued	2013/10/16	Data Revised	2017/01/24
Subject: JS-1178A JS-1178E JS-1183V JS-1400SM Pitch: 1.27mm Double-row SMT Series Board to Board Connector			Issued By: Engineering Dept.

Item(項目)	Test Condition(測試條件)	Requirement(規格)
8.7 Resistance To Soldering Heat 焊錫耐熱性	By reflow soldering 迴焊適用溫度範圍： Refer to Temperature Profile 請參考 8.8.1 溫度曲線圖 by soldering iron 手工烙鐵焊錫適用溫度範圍： 350 ± 5°C 5±0.5 Seconds. (操作方式)：零件焊錫位置，距離導體末端 1.5mm Method : 1.5mm From Square Pin Tip	No deformation or damage. 不可有變形或損壞

8.7.1 Temperature Profile:



10.0 Remark(備註) : Any change or revision for the product specification will not be

announced in advance. Please contact our sales representative for the latest information.

有關規格書內容經變更或改版，如未能夠及時發佈與通知，煩請連絡我司業務人員以提供產品最新資訊