



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.,  
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Type Document	Product Specification	Revised / Edition	A
Date Issued	2019/05/15	Data Revised	
Subject: JS-2511-XX , JS-2511-TXX, JS-2512-XX Pitch 2.50mm Series Wire to Board Connector			Issued By: Engineering Dept.

*This specification is referred to the 2.50mm DIP series wire to board connector.*

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**1.0 Product Name/Part Number & Drawing Number:**

Product Name		Part Number	Drawing Number
Crimp Terminal		JS-2511-T (Stamping after tin plated)	JS-2511-TXX
		JS-2511-T2 (Stamping Before tin plated)	JS-2511-TXX
Housing		JS-2511-XX	JS-2511-XX
Wafer	Straight	JS-2512-XX (Normal square pin)	JS-2512-XX
		JS-2512-XXK (Square pin with holding construction; With lock)	JS-2512-XX

**2.0 Construction/Dimensions/Material & Surface Finish:**

Part Name		Material	Surface Finish
Crimp Terminal		Phosphor Bronze	Tin-Plated
Housing		Nylon 66	UL 94V-0
Wafer	Normal square pin	Brass	Tin or Matte-Tin Plated
	Square pin with holding construction		
	Base	Nylon 66 +15%GF	UL 94V-0



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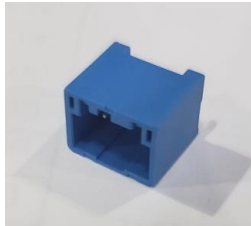
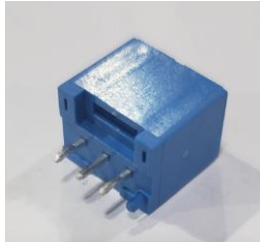


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### 3.0 Characteristic:

Item		Standard	
3.1	Rated Current	3A AC/DC (With AWG #22 is applied)	
3.2	Ambient Temperature Range	Operating Temp.: -45°C~+85°C Including 30°C Terminal Temperature Rise at rated Current . Storage temp.: +5°C~+35 °C	
3.3	Applicable Wire	3.3.1	Conductor Construction Size: AWG #22~#28
		3.3.2	Wire Insulation O.D.: 1.2mm~1.6mm
3.4	Applicable Printed Circuit Board Layout	3.4.1	Thickness: 0.8 mm ~ 1.6 mm
		3.4.2	Hole Size: 0.64±0.03 mm
		3.4.3	Hole Pitch: 2.50 ± 0.05 mm

### 4.0 Specimen:

Part Name/ Part Number/ Picture or Photograph			
Crimp Terminal JS-2511-TXX		Housing JS-2511-XX	
Wafer Straight JS-2512-XX			



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**5.0 Applicable Standards:**

MIL-STD-202 Methods by test of connectors for electronic equipment.

EIA 364 Testing method for electrical connectors.

**6.0 Mechanical Performance:**

Item		Test Condition	Requirement	
6.1	Insertion & Retention Force	Insert and withdraw with connectors at the speed rate of 25±6 mm/minute. (EIA 364-13)	Refer to paragraph 9.1	
6.2	Wire Pullout Force(Axial)	Pull out the cable from contact terminal at the speed rate of 25± 6 mm/minute.	AWG#22 size wire	5.0kgf/Min.
			AWG#24 size wire	3.0kgf/Min.
			AWG#26 size wire	2.0kgf/Min.
			AWG#28 size wire	1.3kgf/Min.



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Item	Test Condition	Requirement	Item
6.3	Crimp Terminal Retention Force ( in Housing )	Axial pullout force on the terminal in the housing at the speed rate of $25 \pm 6$ mm per minute.	Per Contact 1.5kgf/Min.
6.4	Square Pin Retention Force (in Base)	Axial pullout force on the square pin in the base at the speed rate of $25 \pm 6$ mm per minute. (EIA 364-29C)	Per Contact 2.0kgf/Min.
			After Soldering Heat Per Contact 0.7kgf/Min

#### 7.0 Electrical Performance:

Item	Test Condition	Requirement
7.1	Contact Resistance	A maximum voltage of 20mV and a maximum current of 10mA are applied to the Mate connectors. (EIA 364-23)
7.2	Current Continuity	Each circuit of the connector shall be connected in series continuity meter shall detect current discontinuity longer than 1 microsecond during the vibration test.



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Item	Test Condition	Requirement
7.3	Insulation Resistance Apply 500V D/C to any two adjacent contacts to measure the insulation resistance. (EIA 364-21)	Insulation Resistance: Initial 1000 megohms Min.
7.4	Withstanding Voltage 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)	No breakdown or flashover.

#### 8.0 Environmental Performance:

Item	Test Condition	Requirement	Item
8.1	Vibration	Frequency: 10~55~10 Hz/minute. Amplitude: 1.5 mm P-P. Direction: 1. Axis of up and down. 2. Axis of right the left. 3. Axis of front and back. Period: 2 hours for each direction. (EIA 364-28A-23)	Initial Contact Resistance : 10 milliohms Max. (After the test) Contact Resistance: 20 milliohms Max.
			No discontinuity current is longer than 1 microsecond.



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Item	Test Condition	Requirement
8.2	Humidity Steady State  Temperature: 40±2°C. Humidity: 90%~95% (RH). Period: 96 hours continuously. (EIA 364-31)	(After the test) Contact Resistance: 20 milliohms Max.
		(After the test) Insulation Resistance: 500 Megohms Min.
		(After the test) Withstanding Voltage : No breakdown or flashover
8.3	Heat Aging  Temperature: 85±2°C. Period: 96 hours continuously. (EIA 364-17)	(After the test) Contact Resistance: 20 milliohms Max.
8.4	Thermal Shock  One Cycle Consists Of: -55 +0/-3°C for 30 minutes. → Room Temp.5 minutes 85+3/-0°C for 30 minutes. → Room Temp.5 minutes Total Cycles: 25 Cycles.(EIA 364-32)	Same as paragraph 8.2



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Item		Test Condition	Requirement
8.5	Salt Spray	Temperature: 35±2°C. Density: 5 % in weight. Period: Terminal or contact (Stamping after tin plated for 8 hours ) ; Terminal or contact (Stamping before tin plated for 24 hours)	(After the test) Contact Resistance: 20 milliohms Max
8.6	Solder Ability	Solder Temperature: 260± 5°C. Immersion Period: 5±0.5 Seconds Method : 1.5mm From Square Pin Tip. (EIA 364-52)	Solder entirely 95% of immersed area must show no voids or pinholes.
8.7	Resistance To Soldering Heat	Resistance to soldering heat when using normal square pin: Solder Temperature: 230 ± 5°C. Immersion Period: 3~5±0.5 Seconds	No deformation or damage.
		Resistance to soldering heat when using square pin with holding construction or using PA66(G.F.) & (The part can't suitable to pass the IR reflow )	
		By soldering iron:350 ± 5°C 3±0.5 Seconds. Method : 1.5mm From Square Pin Tip	





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9.0 Insertion Force (I.F.) & Retention Force (R.F.)

9.1 Requirement:

No. Of Circuits	AT INITIAL		AT 50TH	No. Of Circuits	AT INITIAL		AT 50TH
	I.F. (MAX)	R.F. (MIN)	R.F. (MIN)		I.F. (MAX)	R.F. (MIN)	R.F. (MIN)
				11			
02	0.6	0.024	0.016	12			
03	0.9	0.036	0.024	13			
04	1.2	0.048	0.032	14			
05	---	---	---	15			
06	1.8	0.072	0.048	16			
07				17			
08				18			
09				19			
10				20			

Unit: Kgf

10.0 Remark: Any change or revision for the product specification will not be announced in advance. Please contact our sales representative for the latest information.