产 品 规 格 书

PRODUCT SPECIFICATION

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产品规格：GJ-A1252 系列	No.: EN-005(2019-09)	Date Issued: Sep.22, 2019
Specification: GJ-1252 Series	Rev. : **A.0**	Date Revised:
1.25mm pitch/Disconnectable Crimp style connectors		Issued by: Engineering Dept.

Prepared by:	Checked by:	Reviewed by:	Approved by:
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Type Document	**Product Specification**	**Revised / Edition**	***A***
Date Issued	***2019/09/22***	**Data Revised**	
Subject: GJ-A1252HM-**-A0N GJ-A1252TM-P** GJ-A1252WVS-**-F0N GJ-A1252WRS-**-F0N ***Pitch 1.25mm SMT Series Wire to Board Connector***			**Issued By: Engineering Dept.**

This specification is referred to the 1.25mm SMT series wire to board connector.

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REV. （版次）	Revision Record （改版變更原因）	Date(日期)	EC No

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1.0 Product Name/Part Number & Drawing Number:

Product Name		Part Number	Drawing Number
Crimp Terminal		GJ-A1252TM	GJ-A1252TM-P**
Housing		GJ-A1252HM	GJ-A1252HM-**-A0N
Wafer	Straight	GJ-A1252WVS	GJ-A1252WVS-**-F0N
	Right Angle	GJ-A1252WRS	GJ-A1252WRS-**-F0N

Note: (xx) The number of the circuits.

2.0 Construction/Dimensions/Material & Surface Finish:

Part Name		Material	Surface Finish
Crimp Terminal		Phosphor Bronze	Tin Plated & Gold Flash
Housing		Nylon 66	UL 94V-0
Wafer	Contacts	Phosphor Bronze	Bright Tin Plated
	Solder Tab	Phosphor Bronze	
	Base	LCP	UL 94V-0
	CAP	LCP	UL 94V-0

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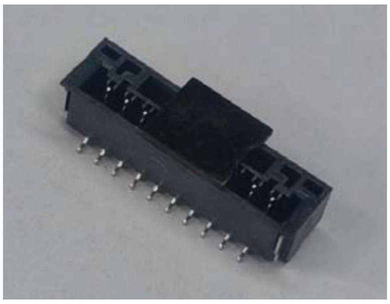
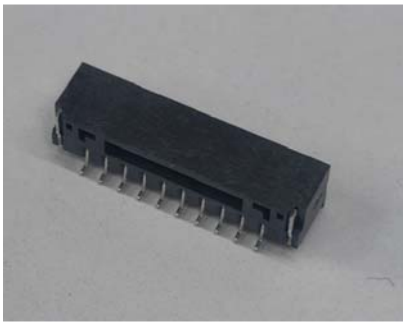
3.0 Characteristic:

Item		**Standard**	
3.1	**Rated Current**	**1A AC/DC (With AWG #28 is applied)**	
3.2	**Rated Voltage**	**50V AC/DC**	
3.3	**Ambient Temperature Range**	**Operating Temp.: -25~+85 ;** **Including 30℃ Terminal Temperature Rise at rated Current .** **Storage temp.: -25~+85 ;**	
3.4	**Applicable Wire**	**3.4.1**	**Conductor Construction Size: AWG #32~#28**
		3.4.2	**Wire Insulation O.D.: 0.7mm~0.9mm**
3.5	**Applicable Printed Circuit Board (PCB)**	**3.5.1**	**SMT Layout: 1.25 ±0.05 mm per Pitch**
		3.5.2	**SMT Layout: 0.6minX1.7±0.05 mm for Pin Post**
		3.5.3	**SMT Layout: 1.0minX2.7±0.05 mm for Ear Buckle**

4.0 Specimen:

Part Name/ Part Number/ Picture or Photograph			
Crimp Contact ***GJ-A1252TM***		**Wafer** **Straight** ***GJ-A1252WVS***	
Housing ***GJ-A1252HM***		**Wafer** **Right Angle** ***GJ-A1252WRS***	

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 25mm/minute. (EIA 364-13) (A housing lock shall be removed for the measurement.)		Refer to paragraph 9.1
6.2	Crimp Tensile Strength(Axial)	Pull out the cable from contact terminal at the speed rate of 25± 6mm/minute.	AWG#28 size wire	1.0Kgf min.
			AWG#30 size wire	0.5Kgf min.
			AWG#32 size wire	0.25Kgf min.
6.3	Contact Retention Force (in Housing)	Axial pullout force on the terminal in the housing at the speed rate of 25 ± 6 mm per minute.		0.7Kgf min.
6.4	Post Retention Force (in Base)	Axial pullout force on the square pin in the base at the speed rate of 25 ± 6 mm per minute. (EIA 364-29C)		0.3Kgf min.
6.5	Locking Strength	A socket housing and a header shall be mated. And then, the load shall be applied between them. The load to come them off each other shall be measured. (Testing speed: 1~ 5 mm/sec.)	2, 3 circuit	1.0 Kgf min.
			4 to 6 circuit	1.2 Kgf min.
			7 to 9 circuit	1.5 Kgf min.
			10 to 15 circuit	2.0 Kgf 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)	Contact Resistance: 30 milliohms Max.
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.	No discontinuity current is longer than 1 microsecond.
7.3	Insulation Resistance	Apply 250V D/C to any two adjacent contacts to measure the insulation resistance. (EIA 364-21)	Insulation Resistance: Initial 100 megohms Min.
7.4	Withstanding Voltage	Apply 500V A/C (rms) for 1 minute and the leakage current shall not excced 0.5mA to the adjacent terminal and ground of the Mate connectors. (EIA 364-20)	No breakdown or flashover.

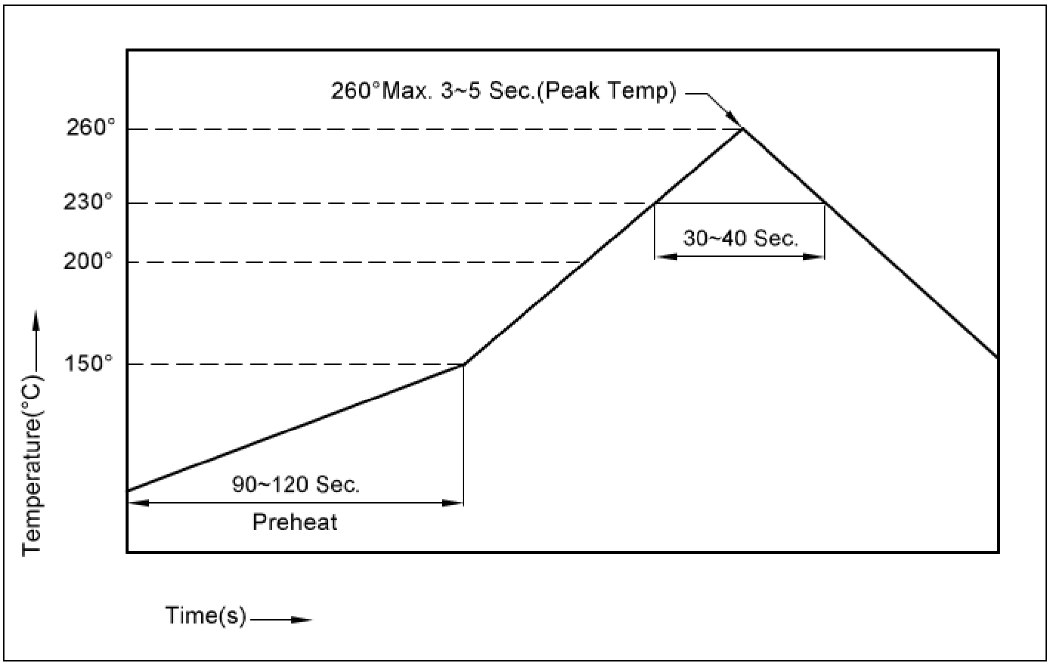
8.0 Environmental Performance:

Item		**Test Condition**	**Requirement**
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 : 30 milliohms Max. (After the test) Contact Resistance: 50 milliohms Max.
			No discontinuity current is longer than 1 microsecond.
8.2	Humidity Steady State	Temperature: 40±2℃. Humidity: 90%~95% (RH). Period: 96 hours continuously. (EIA 364-31)	(After the test) Contact Resistance: 50 milliohms Max.
			(After the test) Insulation Resistance: 100 Megohms Min.
			(After the test) Withstanding Voltage : No breakdown or flashover
8.3	Thermal Shock	One Cycle Consists Of: -55 +0/-3℃for 30 minutes. → Room Temp.5 minutes 85+3/-0℃ for 30 minutes. → Room Temp.5 minutes Total Cycles: 5 Cycles. (EIA 364-32)	Same as paragraph 8.2

Item		**Test Condition**	**Requirement**
8.4	Heat Aging	Temperature: 85±2℃. Period: 96 hours continuously. (EIA 364-17)	Contact Resistance: 50 milliohms Max. after the test.
8.5	Salt Spray	Temperature: 35±2℃. 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) (EIA 364-26)	(After the test) Contact Resistance: 50 milliohms Max
8.6	Solder Ability	Solder Temperature: 245 ± 5℃. Immersion Period: 3±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.

Item		Test Condition	Requirement
8.7	Resistance To Soldering Heat	By reflow soldering: Refer to Temperature Profile 8.8.1	Not deformation or damage.
		By soldering iron: 350 ± 5℃ 3±0.5 Seconds. Method : 0.5mm From Terminal Tip and Solder Tab Tip	

8.7.1 Temperature Profile:



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

9.1 Requirement:

No. Of Circuits	AT INITIAL		AT 30TH	No. Of Circuits	AT INITIAL		AT 30TH
	I.F. (Max)	R.F. (Min)	R.F. (Min)		I.F. (Max)	R.F. (Min)	R.F. (Min)
02	1.7	0.05	0.05	09	2.4	0.40	0.40
03	1.8	0.10	0.10	10	2.5	0.45	0.45
04	1.9	0.15	0.15	11	2.6	0.50	0.50
05	2.0	0.20	0.20	12	2.7	0.55	0.55
06	2.1	0.25	0.25	13	2.8	0.60	0.60
07	2.2	0.30	0.30	14	2.9	0.65	0.65
08	2.3	0.35	0.35	15	3.0	0.70	0.70

(Kg/f)

10.0 Caution : Parts are made of hydrophilic Polyamide LCP and apt to absorb moisture. Once the vacuum-packing unpacked, please keep parts in the environment of temperature < 30℃/ humidity < 60% RH, and send to re-flowing within 72 hours to prevent parts blistered or deformed during soldering.

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