



SPECIFICATION

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SPEC. NO.: PS-50265-XXXXX-XXX REVISION: B

PRODUCT NAME: 1.0mm PITCH WTB LVDS CONN SMT R/A

PRODUCT NO: 50265 / 50262 / 50267/51265 Series

PREPARED APPROVED: XUFEI DATE: 2014.01.10	CHECKED: JERRY DATE: 2014.01.10	APPROVED: JASON DATE: 2014.01.10
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TITLE: 1.0MM PITCH WTB LVDS CONN SMT R/A TYPE

RELEASE DATE: 2014.01.10

REVISION: B

ECN No: ECN-1401187

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1 Revision History

Rev.	ECN #	Revision Description	Prepared	Date
O	ECN-0812210	NEW DRAWING	JASON	2008.11.15
A	ECN-1308403	ADD 51265 SERIES	DAVID	2013.09.11
B	ECN-1401187	ADD WORKING VOLTAGE	XUFEI	2014.01.10

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2 SCOPE

This specification covers performance, tests and quality requirements for 1.0mm PITCH WTB LVDS CONN. These connectors are standard for LCD panel

3 APPLICABLE DOCUMENTS

EIA-364 ELECTRONICS INDUSTRIES ASSOCIATION

4 REQUIREMENTS

4.1 Design and Construction

- 4.1.1 Product shall be of design, construction and physical dimensions specified on applicable product drawing.
- 4.1.2 All materials conform to R.o.H.S. and the standard depends on TQ-WI-140101.

4.2 Materials and Finish

- 4.2.1 Contact: High performance copper alloy (Refer to the drawing)
 - Finish: (a) Contact Area: Refer to the drawing
 - (b) Under plate: Refer to the drawing
- 4.2.2 Housing: Thermoplastic, High temp. UL94V-0.
- 4.2.3 Metal Shell: Refer to the drawing

4.3 Ratings

4.4 Ratings

- 4.4.1 Working voltage less than 36 volts (per pin)
- 4.4.2 Voltage: 100 Volts AC
- 4.4.2 Current: AWG#28:1A ,AWG#30:0.9A ,AWG#32:0.8A ,AWG#36:0.5 Amperes
- 4.4.3 Operating Temperature : -35°C to +85°C

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5 Performance

5.1. Test Requirements and Procedures Summary

Item	Requirement	Standard
Examination of Product	Product shall meet requirements of applicable product drawing and specification.	Visual, dimensional and functional per applicable quality inspection plan.
ELECTRICAL		
Item	Requirement	Standard
Low Level Contact Resistance	50m Ω Max.(initial)per contact ΔR 30 m Ω Max. Change allowed	Mate connectors, measure by dry circuit, 20mV Max., 100mA Max. (EIA-364-23)
Insulation Resistance	500 M Ω Min.	Unmated connectors, apply 100 V DC between adjacent terminals. (EIA-364-21)
Dielectric Withstanding Voltage	No discharge, flashover or breakdown. Current leakage: 1 mA max.	150 VAC Min. at sea level for 1 minute. Test between adjacent contacts of unmated connectors. (EIA-364-20)
Temperature rise	30°C Max. Change allowed	Mate connector: measure the temperature rise at rated current until temperature stable. The ambient condition is still air at 25°C (EIA-364-70,METHOD1,CONDITION1)
MECHANICAL		
Item	Requirement	Standard
Durability (insertion / withdrawal)	30 cycles.	The sample should be mounted in the tester and fully mated and unmated the number of cycles specified at the rate of 25.4 \pm 3mm/min. (EIA-364-09)
Mating / Unmating Forces (per pin)	Mating Force: 3N Max. Unmating Force: 0.2N Min. (per pin)	Measured with a steel ϕ 0.2 \pm 0.005 Operation Speed : 25.4 \pm 3 mm/minute.. Measure the force required to mate/Unmate connector. (EIA-364-13)
Contact Retention Force (Board Side)	30gf Min.	Operation Speed : 10 \pm 3 mm/minute. Measure the contact retention force with Tensile strength tester.
Terminal / Housing Retention Force (Cable Side)	150gf MIN.	Apply axial pull out force at the speed rate of 25.4 \pm 3 mm/minute. On the terminal assembled in the housing.

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Vibration	No electrical discontinuity of 1 μ s Max.	The electrical load condition shall be 100 mA maximum for all contacts. Subject to a simple harmonic motion having amplitude of 0.76mm (1.52mm maximum total excursion) in frequency between the limits of 10 and 55 Hz. The entire frequency range, from 10 to 55 Hz and return to 10 Hz, shall be traversed in approximately 1 minute. This motion shall be applied for 2 hours in each of three mutually perpendicular directions. (EIA-364-28 Condition I)
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ENVIRONMENTAL

Thermal Shock	See Product Qualification and Test Sequence Group 4	Mate module and subject to follow condition for 5 cycles. 1 cycles: -55 +0/-3 °C, 30 minutes +85 +3/-0 °C, 30 minutes (EIA-364-32, test condition I)
Resistance to Reflow Soldering Heat	See Product Qualification and Test Sequence Group 9	Pre Heat : 150°C~180°C, 60~120sec. Heat : 230°C Min., 40sec Min. Peak Temp. : 260°C Max, 10sec Max. Reflow number cycle: 2 times (EIA-364-56)
Hand Soldering Temperature Resistance	Appearance: No damage Sequence Group 10	T \geq 350°C, 3sec at least.
Humidity	See Product Qualification and Test Sequence Group 4	Mated Connector 40 \pm 2°C, 90~95% RH, Reefer to Method II. (EIA-364-31, Test condition A)
Temperature life	See Product Qualification and Test Sequence Group 5	Subject mated connectors to temperature life at 85°C for 96 hours. Measure Signal. (EIA-364-17, Test condition A)
Salt Spray (Only For Gold Plating)	See Product Qualification and Test Sequence Group 6	Subject mated/unmated connectors to 5% salt-solution concentration, 35°C for 8 hours. (EIA-364-26, Test condition B)
Solder ability	Solder able area shall have minimum of 95% solder coverage. Sequence Group 7	Subject the test area of contacts into the flux for 5-10 sec. And then into solder bath, Temperature at 245 \pm 5°C, for 4-5 sec. (EIA-364-52)

Note. Flowing Mixed Gas shall be conducted by customer request.

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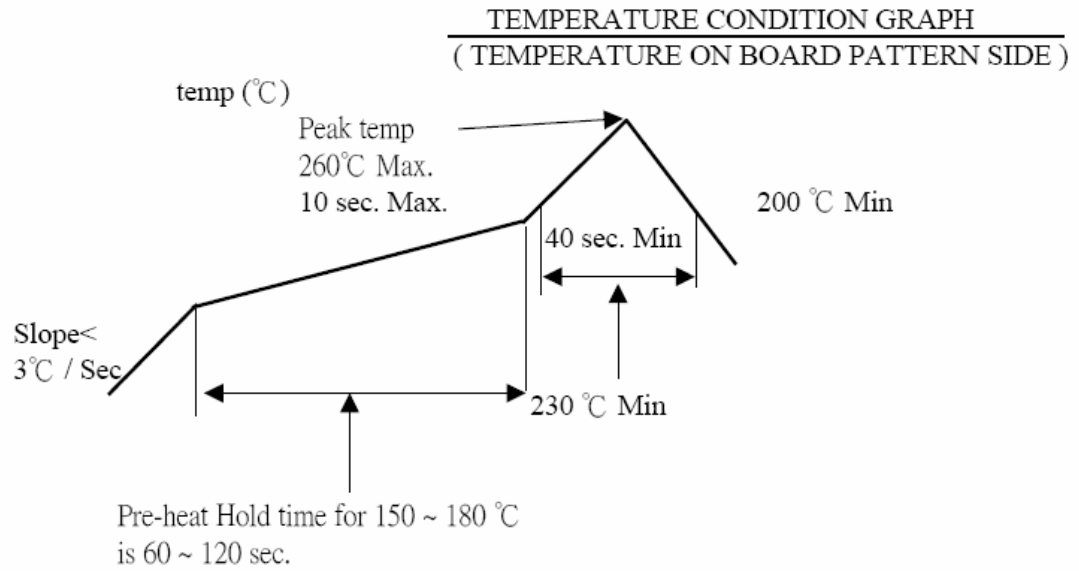
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6 INFRARED REFLOW CONDITION

6.1 Lead-free Process



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7 PRODUCT QUALIFICATION AND TEST SEQUENCE

Test or Examination	Test Group									
	1	2	3	4	5	6	7	8	9	10
	Test Sequence									
Examination of Product	1、3		1、5	1、7	1、6	1、4			1	1
Low Level Contact Resistance		1、5	2、4	2、10	2、9	2、5			3	
Insulation Resistance				3、9	3、8					
Dielectric Withstanding Voltage				4、8	4、7					
Temperature rise	2									
Mating / Unmating Forces		2、4								
Durability		3								
Contact Retention Force								1		
Vibration			3							
Thermal Shock				5						
Humidity				6						
Temperature life					5					
Salt Spray(Only For Gold Plating)						3				
Solder ability							1			
Resistance to Reflow Soldering Heat									2	
Hand Soldering Temperature Resistance										2
Sample Size	2	4	4	4	4	4	2	4	4	4