

Product specification

1. Scope

This specification applies to the 0.5mm pitch FFC type LVDS series connectors, specifying the product's performance indicators, test methods and test requirements.

Applicable Product Model: FLV05005 series

2. Applicable Standards

The following documents form a part of this specification. In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and the referenced documents, this specification shall take precedence.

3. Parameter Range

Parameter Name	Value & Unit
Operating Temperature	-40℃~+85℃(including terminal temperature rise)

4. Appearance and Dimensions

4.1 Appearance: Product surface without defect, dirt, crack, and mechanical damage, Contacts without rust; plating without oxidation and peeling

4.2 Appearance and dimensions shall comply with the requirements of product drawings.

5. Materials

Component	Material Specification	Color
Housing	LCP (UL94V-0)	Black
Shell	SUS201 (Nickel-Plated)	-
Buckles	SUS201 (Nickel-Plated)	-

6. Test Requirements and Procedures Summary

Serial No.	Item	Test Method	Technical Requirements
1	Examination of Product	Visual inspection	Meet the drawing requirements, no damage or abnormality in visual appearance
Mechanical Characteristics			
2	Latch Yield Strength	Mate connectors and pull apart until both latches break at the speed rate of 25 ± 3mm/minute.	4.0kgf Min
3	Mating/unmating Force	Measure force necessary to mate between the counter connectors Operation speed:25+3mm/minute	Mating Force :4.0kgf Max Unmating Force :0.5kgf Min

4	FFC Cable /Housing Retention Force	Insert the crimped terminal Into the housing at a cons ,Apply axial pull out force Speed of 25±3mm/minute.	3.0kgf/PIN Min.
5	Durability	Operation speed: maximum 10 times/min; durability cycle times: 50 times	Contact Resistance: 100 mΩ Max
6	Vibration	Amplitude: 1.52m; Frequency;10~55~10HZ; Vibration time:2 hours for 3 axistotal 6 hours.	Appearance: no damage; contact resistance: 100 mΩ Max; power-off time: 1 μs Max
7	Mechanical Shock	The connector is soldered on the printed circuit board; acceleration: 50 G; shock time: 11 ms (half-sine wave) ; cycle times: 3 times for each X, Y, Z axis, total 9 times (JIS C0041/MIL-STD-202 Method 213)	
Environmental Performance			
8	Heat Resistance	The connector is in the mated state and placed at 85 °C for 96 h	Appearance: no damage
9	Cold Resistance	The connector is in the mated state and placed at -40 °C for 96 h	Appearance: no damage
10	Thermal Shock	Temperature range: -40~+85 °C; start from -40 °C, keep constant temperature for 30 min, then switch to +85 °C, transition time ≤30 s; total cycle times: 5 times	Appearance: no damage
11	Humidity-Te mperature Cycle	Temperature (40±2) °C, relative humidity 90~95% for 96 h; after the test, place the connector at room temperature for 1~2 h before testing (EIA-364-31A,Method II ,ConditionA)	Appearance: no damage
12	Salt Spray	Salt concentration: 5%, temperature: (35±2) °C, test time: (24±2) h; after the test, rinse residual salt with clean water, wipe dry before measurement (EIA-364-26A Condition A)	Appearance: no damage