240 Pin DIMM Through Hole Vertical Type Socket

1. SCOPE

1.1. Content

This specification covers the performance, tests and quality requirements for the 240 Pin DIMM Through Hole Vertical Type Socket used primarily in desktop applications

1.2. Qualification

When tests are performed on the subject product line, the procedures specified in Figure 1 shall be used. All inspections shall be performed using the applicable inspection plan and product drawing.

1.3. Qualification test

Successful qualification testing on the subject product line was proceeding.

2. APPLICABLE DOCUMENT

The following documents form a part of this specification to the extent specified herein. Unless otherwise specified, the latest edition of the document applies. 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. REQUIREMENTS

3.1. Design and Construction

Product shall be of the design, construction and physical dimensions specified on the applicable product drawing.

3.2. Materials

Materials used in the construction of this product shall be as specified on the applicable product drawing.

3.3. Ratings

A. Voltage: **25** VAC

B. Current: **0.5** A Max

C. Temperature: - **40**°C to **85** °C

3.4. Performance and Test Description

The product shall be designed to meet the electrical, mechanical and environmental performance requirements specified in Figure 1.

3.5. Test Requirements and Procedures Summary

Test Item		Requirement	Procedure
1	Examination of Product	Meets requirements of product drawing. No physical damage.	Visual inspection
ELECTRICAL REQUIREMENT			
2	Contact resistance	30 milliohms Max (Initial) □R 10 milliohms Max (Final)	Subject mated contacts assembled in housing to 20 mV Max open circuit at 100 mA Max. EIA-364-23
3	Dielectric withstanding Voltage	No creeping discharge or flashover shall occur.	500 VAC for 1 minute Test between adjacent circuits of unmated connector. EIA-364-20
4	Insulation resistance	1000 M-Ohm min.	Impressed voltage 500 VDC. Test between adjacent circuits of unmated connector. EIA-364-21A.
5	Current rating	T rise 30℃ max.	Apply 0.5 ADC current in each contact. Measure the temperature rise. EIA-364-70
MECHANICAL REQUIREMENT			
6	Module insertion force	106.75 N (10.89 Kgf) max.	Measure module card insertion force with 1.37mm THK steel gage at rate of 25mm/minute EIA-364-13
7	Module unmating force	16.5 N (1.68 Kgf) min.	Measure module unmating force without latch locked at a rate of 25mm/minute EIA-364-13
8	Durability	Meets requirements of product drawing. No physical damage.	25 times mating/unmating cycles with max THK module (1.37mm) at a rate of 25 mm/minute. EIA-364-9
9	Vibration	No discontinuities of 1 microsecond or longer duration.	Module THK: 1.27mm Module weight 35g +/- 5g with the center of gravity of 20-25 mm from the module mating edge. Duration: 10 minutes per axis for all 3 axes on all samples. Frequency Range: 5 Hz to 500 Hz. 5 to 20Hz (slope): ($0.01g^2$/Hz)@5Hz, ($0.02g^2$/Hz)@20Hz; 20 to 500Hz (flat): ($0.02g^2$/Hz)@20Hz; Input acceleration is 3.13 g RMS; Random control limit tolerance: ± 3 dB. EIA-364-28

Figure 1（continued）

MECHANICAL REQUIREMENT			
Test Item		**Requirement**	**Procedure**
10	Mechanical shock	No discontinuities of 1 microsecond or longer duration.	Module weight 35g+/-5g with center of gravity of 20~25 mm from module mating edge. 1.Acceleration: 50 g, Trapezoidal. 2.Shock duration: 11 ms. 3.3 shocks in each of 6 directions. EIA-364-27
11	Contact retention force	3N (0.3 kgf) min. per pin	Measure the contact retention force with Tensile strength tester. EIA-364-29.
12	Solderability	Wet solder coverage: 95% min.	Solder Temp.：235±5□, 5±0.5sec.
ENVIRONMENTAL REQUIREMENT			
13	Resistance to wave soldering heat	No physical damage shall occur	Solder Temp.：265±5℃, 10±0.5sec.
14	Thermal shock	See Note	Mated connector -40℃(30 minutes), +85℃(30 minutes) Perform this a cycles, repeat 10 cycles EIA-364-32
15	Temperature life	See Note.	Test Condition 4. Subject mated and mounted specimens to 105□ for 96 hours. EIA-364-17, Method A,
16	Salt spray	See Note.	Subject mated specimens to 5% salt concentration at 35 +1/-2□ for 48 hours. EIA-364-26, Test Condition B.

Figure 1（End）

NOTE：Shall meet visual requirements, show no physical damage, and meet requirements of additional tests as specified in the test sequence in Figure 2

3.6. Product Qualification and Requalification test

Test or Examination	Test Group							
	1	2	3	4	5	6	7	8
	Test Sequence (a)							
Examination of product	1, 9	1, 3	1, 6	1, 5	1, 9	1, 5	1, 3	1, 3
Contact resistance	2, 8		2, 5	2, 4	2, 8	2, 4		
Dielectric withstanding voltage					4, 7			
Insulation resistance					3, 6			
Current rating		2						
Module insertion force	3, 7							
Module unmating force	4, 6							
Durability	5							
Vibration			3					
Mechanical shock			4					
Contact retention force							4	
Solderability								2
Resistance to wave soldering heat							2	
Thermal shock				3				
Temperature life					5			
Salt spray						3		

Figure 2

NOTE: (a) Numbers indicate sequence in which tests are performed.