



SPECIFICATION  
AND  
PERFORMANCE

TYPE OF PRODUCT

2.00mm IC SOCKET

1. Scope:

This specification covers the requirements for product performance, test methods and quality assurance provisions of 2.00mm Pin Header.

2. Reference Documents:

The following documents form a part of this specification to the extent specified herein. 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.

A. EIA-364

The Test Sequence and Test procedures for Electrical Connectors and Sockets

3. Material of Components :

	component	Material	Finish
1	Housing	PPS OR PA6T	None
2	Contact	Brass	Refer to Ordering Information

4. Design and Construction:

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

5. Performance and Test Descriptions:

The product is designed to meet the electrical, mechanical and environmental performance requirements specified below. All tests are performed at ambient temperature unless otherwise specified.

Issued No	Date	Sheet	Rev
	2019/05/25	1 OF 6	A0



SPECIFICATION  
AND  
PERFORMANCE


TYPE OF PRODUCT

2.54mm IC SOCKET

5.1 Electrical Performance:

	Test Items	Test Procedures & Condition	Requirements
1	Contact Resistance	EIA-364-23  Subject mated contacts assembled in housing to closed circuit current of 100 mA maximum at open circuit at 20 mVDC maximum.	1. Initial value : 20 mΩ max.  2. Final value : 30 mΩ max.
2	Insulation Resistance	EIA-364-21  Measure by applying test potential between the adjacent contacts, and between the contacts and ground in the mated connector assemblies.  Test Voltage : 1000 V DC. Test Duration: 1 Minute	Not less than 1000 MΩ
3	Dielectric Withstanding Voltage	EIA-364-20  Measure by applying test potential between the adjacent contacts, and between the contacts and ground in the mated connector assemblies.  Test Potential : 500Vac at sea level Test Duration : 1 Minute	1. No disruptive discharge, leakage or deterioration.  2. Current leakage : <0.5 mA

Issued No	Date	Sheet	Rev
	2019/05/25	2 OF 6	A0

	<b>SPECIFICATION AND PERFORMANCE</b>	TYPE OF PRODUCT
		2.54mm IC SOCKET

5.2 Mechanical Performance:

	Test Items	Test Procedures & Condition	Requirements
1	Retention force	EIA-364-29  Draw out a contact in solder tail direction at 5mm/minute	Minimum 1kgf ( Per Pin )
2	Durability	EIA-364-09  Mate contact at 25.4mm/minute for 500cycles	1. No evidence of damage.  2. The electrical performances meet the spec. specified in paragraph 5.1
3	Solder ability	EIA-364-52 Category 3  Subject unmated connectors should be tested according to the condition listed below :  Steam Aging Temperature : 90 ~ 96°C Steam Aging Duration : 8 hours±5 min. Soldering Temperature : 245±5°C Soldering Time : 4 ~ 5 seconds	Continuous solder coating with a minimum 95% coverage.

Issued No	Date	Sheet	Rev
	2019/05/25	3 OF 6	A0



SPECIFICATION  
AND  
PERFORMANCE

TYPE OF PRODUCT

2.54mm IC SOCKET

	Test Items	Test Procedures & Condition	Requirements
4	Vibration	<p>EIA-364-28 Condition V Test letter A</p> <p>Subject mated connectors should be tested according to the condition listed below :</p> <p>Test condition : Random Frequency : 50 ~ 2000 Hz PSD value : 3.13 Grams minimum Duration : 15 minutes/axis Times : Each of three mutually perpendicular planes.</p>	<ol style="list-style-type: none"><li>1. No evidence of damage.</li><li>2. No discontinuities of 1µs or longer duration.</li><li>3. The electrical performances meet the spec. specified in paragraph 5.1</li></ol>
5	Physical Shock	<p>EIA-364-27 Condition H</p> <p>Subject mated connectors should be tested according to the condition listed below :</p> <p>Wave form : Half-sine Peak acceleration : 30 G' s Duration : 11 ms Times : 3 shocks in each direction applied along three mutually perpendicular planes, total 18 shocks.</p>	<ol style="list-style-type: none"><li>1. No evidence of damage.</li><li>2. No discontinuities of 1µs or longer duration.</li><li>3. The electrical performances meet the spec. specified in paragraph 5.1</li></ol>

Issued No	Date	Sheet	Rev
	2019/05/25	4 OF 6	A0



**SPECIFICATION  
AND  
PERFORMANCE**

TYPE OF PRODUCT

2.54mm IC SOCKET

**5.3 Environmental Performance:**

	Test Items	Test Procedures & Condition	Requirements
1	Humidity	EIA 364-31 Method III Test Condition A  Subject mated connectors should be tested according to the condition listed below : Temperature : 25 ~ 65°C Humidity : 90 ~ 95% ( R.H ) Duration : 96 hours	1. No evidence of damage.  2. The electrical performances meet the spec. specified in paragraph 5.1
2	Thermal Shock	EIA 364-32 Test Condition I  Subject mated connectors should be tested according to the condition listed below : Temperature : -40 ~ 105°C Cycles : 5 Exposure time at temperature extremes : 30 minutes	1. No evidence of damage.  2. The electrical performances meet the spec. specified in paragraph 5.1
3	Salt Spray	EIA 364-26 Test Condition A  Subject mated and unmated connectors should be tested according to the condition listed below :  Temperature : 35±2°C Humidity : 95 ~ 98% ( R.H ) PH Value : 6.5 ~ 7.2 Duration : 24 hours	1. No evidence of damage.  2. The electrical performances meet the spec. specified in paragraph 5.1

Issued No	Date	Sheet	Rev
	2019/05/25	5 OF 6	A0



SPECIFICATION  
AND  
PERFORMANCE

TYPE OF PRODUCT

2.54mm IC SOCKET

	Test Items	Test Procedures & Condition	Requirements
4	Temperature Life	EIA 364-17 Test Condition 3 Method A  Subject mated connectors should be tested according to the condition listed below :  Temperature : $105\pm 2^{\circ}\text{C}$ Duration : 96 hours	1. No evidence of damage.  2. The electrical performances meet the spec. specified in paragraph 5.1
5	Resistance to Soldering Heat	EIA 364-56 Procedure 3 Test Condition C  PPS/PA6T Thermoplastic Can Resistance to Reflow Soldering Heat: $260\pm 5^{\circ}\text{C}$ 5-10 Seconds  PPS/PA6T Thermoplastic Can Resistance to Wave Soldering Heat: $260\pm 5^{\circ}\text{C}$ 5-10 Seconds  Under PCB board Temperature: $260\pm 5^{\circ}\text{C}$	1. No evidence of damage.  2. The electrical performances meet the spec. specified in paragraph 5.1  3. The mechanical performances meet the spec. specified in paragraph 5.2

Issued No	Date	Sheet	Rev
	2019/05/25	6 OF 6	A0