

* A7921 SERIES RAST5 TYPE *

This product specification contains the test method, the following datum are the general performance and requirements of the A7921 series wafer & socket.

1. Construction and dimensions shall be in accordance with the referenced drawings.

2. Characteristics:

Current rating: 16 A max. AC DC

Voltage rating: 380V AC DC

Temperature rating: -40 ~ +105 °C

3. Electrical performance:

Item	Description	Test Method & Condition	Requirement
3-1	Contact resistance	It should be tested in accordance with method EIA-364-23.	20mΩ max. Initial. After test 40 mΩ max.
3-2	Insulation resistance	In accordance with EIA-364-21, DC 500 V shall be applied between contacts and between an individual contact and a case for one minute.	1000 MΩ min initial. After test 500 MΩ min.
3-3	Dielectric Withstanding Voltage	In accordance with EIA-364-20, AC 500 V shall be applied between contacts and between an individual contact and a case for one minute. (leak current 2mA)	There should be not flash over spark over or dielectric breakdown.

4. Mechanical Performance :

Item	Description	Test Method & Condition	Requirement
4-1	Pin Retention Force from Base	Apply axial pull out force at the speed: 25 mm / minute on the contact assembled in the housing.	2.0kgf/Contact Min.
4-2	Terminal Retention Force from Housing	Apply axial pull out force at the speed: 25 mm / minute on the contact assembled in the housing.	4.0kgf/Contact Min.
4-3	Terminal Mating Force (Without lock)	Inserting speed: 25 mm/minute.	2.0kgf Max.
4-4	Terminal Unmating Force (Without lock)	Pulling speed: 25 mm/minute.	0.6kgf Min.
4-3	Terminal Mating Force (With lock)	Inserting speed: 25 mm/minute.	2.5kgf Max.
4-4	Terminal Unmating Force (With lock)	Pulling speed: 25 mm/minute.	3.5kgf Min.

5. Environmental Performance :

Item	Description	Test Method & Condition	Requirement
5-1	Humidity	Test method EIA-364-31. Temperature: 40±2 °C Humidity: 90 ~ 95 % (RH) Period: 96 hours.	NO damage. Contact resistance less than twice of initial. Insulation resistance more than 10 MΩ
5-2	Salt spray	Connector shall be tested in accordance with method EIA-364-26. Temperature: 35±2 °C Density: 5 % in weight. Period: 48 hours.	NO damage. Contact resistance less than twice of initial.
5-3	Solder ability	Connector termination ends shall be checked for solder ability in accordance with method EIA-364-52. Solder temperature: 240±5 °C Immersion period: 5±0.5 sec.	NO damage. Minimum: 95 % of immersed area.
5-4	Resistance to soldering heat	Soldering Time: 3 ~ 5 sec. Soldering Temperature: 260 ± 5 °C	NO damage.
5-5	Temperature rise	The assembled connector for actual use shall be connected in series and test current of 10mA shall be applied to the specimen. After temperature of contact is stabilized, temperature at crimped section shall be measured by thermocouples of ϕ 0.2~0.3 mm.	Temperature rise 30 °C max.

6. VDE test item:

Item	Description	Test Method & Condition	Requirement
6-1	Impulse withstand test	It shall be carried out with a voltage having a 1.2/50 μ s waveform according to IEC 60060-1 with three impulses of each polarity and an interval at least 1 s between pulses. The output impedance of the impulse generator should not be higher than 500 Ω Preferred value for the rated impulse voltage is grade II: 2.5 KV Test voltage is 2.95KV (1.2/50 μ s)	There shall be not flash over spark over or dielectric breakdown.
6-2	Voltage proof(Test 4a of IEC 60512)	Test shall be according to test 4a of IEC60512.Test duration shall be 1 min. Test voltage is 1.39KV (rms)	There shall be not flash over spark over or dielectric breakdown.

7. Socket Mating Force and Unmating Force for RAST5 Serial:
(Remove the lock on the housing)

No. Of circuits	Mating Force Max. (Unit: kgf)	Unmating Force Min. (Unit: kgf)
2 Circuits	4.0	1.6
3 Circuits	5.0	2.2
4 Circuits	6.0	2.8
5 Circuits	7.5	3.4
6 Circuits	8.5	4.0
7 Circuits	9.5	4.6
8 Circuits	10.0	5.2
9 Circuits	10.5	5.8
10 Circuits	11.0	6.4
11 Circuits	11.5	7.0
12 Circuits	12.0	7.6

APPR BY :

CHKD BY:

SPEC BY :