

SPECIFICATION AND PERFORMANCE

Series	320A-Series	File	320A_Spec	Date	2025/07/18
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Scope:

This specification covers the requirements for product performance, test methods and quality assurance provisions of below

Part Name	Description
320A-R060S00	Board to Board Floating Receptacle, Female, 60PIN, Vertical
320A-R080S00	Board to Board Floating Receptacle, Female, 80PIN, Vertical
320A-R100S00	Board to Board Floating Receptacle, Female, 100PIN, Vertical
320A-P060R00	Board to Board Floating Plug, Male, 60PIN, R/A
320A-P080R00	Board to Board Floating Plug, Male, 80PIN, R/A
320A-P100R00	Board to Board Floating Plug, Male, 100PIN, R/A

Performance and Descriptions:

The product is designed to meet the electrical, mechanical and environmental performance requirements specification. Unless otherwise specified, all tests are performed at ambient environmental conditions.

RoHS:

All material in according with the RoHS environment related substances list controlled.

MATERIALS		
NO.	PART NAME	DESCRIPTION
1	Housing	Thermoplastic, black
2	Contact	Copper alloy, 5u" gold plating on contact area, matte-tin plating on solder area, under plating nickel over all.
3	Solder Peg	Copper alloy, matte-tin over nickel plating.

RATING	
Rated Current	0.4A Max. per pin
Operating Temperature	-40°C ~105°C
Storage Temperature	-40°C ~105°C
Durability	100 Cycles



ELECTRICAL

Item	Requirement	Test Condition
Contact Resistance	80mΩ Max. initial, ΔR<20 mΩ Max. final	Measure by applying closed circuit current of 10mA maximum at open circuit voltage of 20mV (max).
Insulation Resistance	100MΩ Min.	Mate connectors, apply 250V DC between two adjacent contacts for one minutes.
Withstanding Voltage	No breakdown	Mate connectors, apply 200V AC between two adjacent contacts for one minutes.

MECHANICAL

Item	Requirement	Test Condition
Mating Force/ Un-mating Force	Mating force 29.4 N Max. Un-mating force 3 N Min.	Measure the force required to mate connectors Speed 25.4 mm/minute Contacts 60
Durability	Contact resistance: ΔR<20 mΩ Max. final	Solder connectors on PCB, then place them on the pull-push machine, and repeat push the contact 100 cycles at the speed of 400~600 cycles per hours.

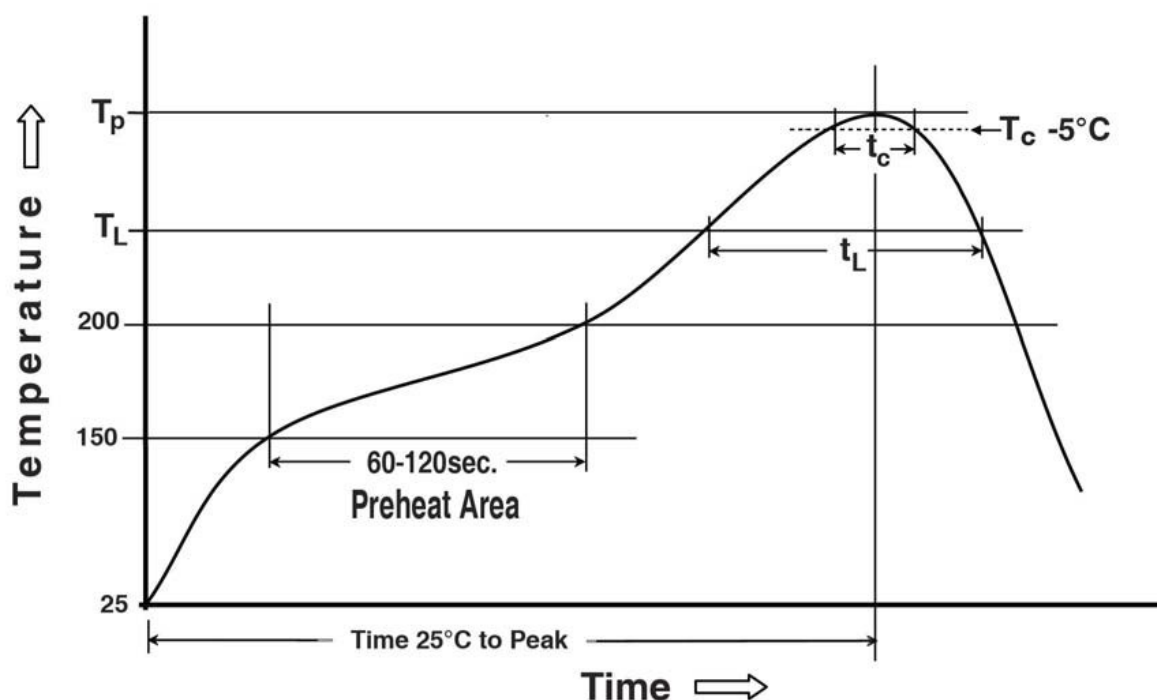
ENVIRONMENTAL

Item	Requirement	Test Condition
Vibration	Discontinuity ≤1μsec	Solder connectors on PCB, subject to the following vibration conditions, for a period of 2 hours in each of 3 mutually perpendicular axes, passing DC 100mA current during test. Amplitude 1.52mm P-P Sweep frequency 10~55Hz/min Shall be traversed in 1 minutes
Humidity	Contact resistance: ΔR<20 mΩ Max. final	Solder connectors on PCB, expose to 40±2°C with 90~95% RH for 96 hours
Thermal Shock	Contact resistance: ΔR<20 mΩ Max. final	Temperature Range: -40 to 105°C No. of Cycles: 5 cycles for 30 minutes
Temperature Life	Contact resistance: ΔR<20 mΩ Max. final	Mated connectors, temperature 85°C, duration 250 hours.
Salt Spray	Contact resistance: ΔR<20 mΩ Max. final	Salt concentration 5%, temperature 35°C, after salt is removed by running water and a drop is removed, it is measured



SOLDER ABILITY		
Item	Requirement	Test Condition
Solder ability	95% of immersed area must show no voids, pin holes	The termination should be 95% covered with new continuous solder coating Solder temperature: $245 \pm 5^{\circ}\text{C}$ Test time: 5 ± 1 seconds, (Per EIA-364-71)
Resistance to soldering heat	No melting, cracks or functional damage allowed	Preheating temperature: $150 \sim 200^{\circ}\text{C}$, 60~120 seconds Liquidus temperature (TL): 217°C , 60~150 seconds Peak temperature: 260°C Time within 5°C of peak temperature (T_c): 255°C , 30seconds

Reflow Profile



Preheating temperature: $150 \sim 200^{\circ}\text{C}$, 60~120 seconds

Liquidus temperature (TL): 217°C , 60~150 seconds

Peak temperature: 260°C

Time within 5°C of peak temperature (T_c): 255°C , 30seconds