立威科技股份有限公司 Attend Technology Inc.
新北市汐止區新台五路一段81號10樓之六
10F-6, No.81, Sec.1, Xintai 5th Rd., Xizhi-Dist., New Taipei City 221, Taiwan, R.O.C.
TEL 886 2 2698 7028 FAX 886 2 2698 7078 WEBSITE www.attend.com.tw

# SPECIFICATION AND PERFORMANCE

| Series | 115U-A101 | File | 115U-A101-SPEC_4 | Date | 2025/07/22 |
|---|---|---|---|---|---|

## Scope:

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

Connector: (This part is a connector only, it should be used together with Nano SIM Tray)

| P/N | Descriptions |
|---|---|
| 115U-A101 | Nano SIM Socket, 6 Pin, Tray-Push Push, Lock, G/F, 700 Reel |

Nano SIM tray:

| TEMP | P/N | Descriptions |
|---|---|---|
| 85°C | 115U-T001 | Card Tray, Used for Nano SIM Card Socket Push Push, Lock, PC+ABS, Black, Bag |
| 105°C | 115U-T007 | Card Tray for 115U-A101/A110, Nano SIM, PBT black, Bag, L16.25 |
| 105°C | 115U-T008 | Card Tray for 115U-A101/A110, Nano SIM, PBT black, Bag, L18.25 |

## 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 | LCP E130i, UL94-V0, black or equivalent |
| 2 | Contact | Copper alloy C7025 0.1t, 1u" min. Gold plating on contact area, 120u" min. matte-Tin plating on solder area, under plating 50u" min. Nickel over all |
| 3 | Slider | LCP E130i, UL94-V0, black |
| 4 | Shell | Stainless Steel SUS304, 0.10t, 50u" min. Nickel over all |
| 5 | Crank | Stainless Steel SUS304 or SUS130M |
| 6 | Spring | SWP-B Dia. 0.18mm, 50u" min. Nickel plating over all |

| RATING | |
|---|---|
| Rated Voltage | 10V |
| Rated Current | 0.5A |
| Operating Temperature | -40°C to +105°C |
| Storage Temperature | -40°C to +105°C |
| Durability | 5,000 cycles |

ATTEND
Connect to Your Success

立威科技股份有限公司 Attend Technology Inc.
新北市汐止區新台五路一段81號10樓之六
10F-6, No.81, Sec.1, Xintai 5th Rd., Xizhi-Dist., New Taipei City 221, Taiwan, R.O.C.
TEL 886 2 2698 7028 FAX 886 2 2698 7078 WEBSITE www.attend.com.tw

| ELECTRICAL | | |
|---|---|---|
| Item | Requirement | Test Condition |
| Low Level Contact Resistance | Initial 50mΩ Max.<br>After test 100mΩ Max. | Solder connectors to PCB and insert dummy card, measure by applying closed circuit current of 10mA maximum at open circuit voltage of 20mV (max). (Per EIA-364-23) |
| Dielectric Withstanding Voltage | No Broken | 500V AC (rms.) between two adjacent for 1 minute.<br>(Trip current:1mA) (Per EIA-364-20) |
| Insulation Resistance | 1000MΩ Min. | Apply 500V DC between adjacent contacts, or contact and ground. (EIA-364-21) |
| Temperature Rise | 30°C max. | EIA-364-70<br>Mate connectors, measure the temperature rise at rated current after 0.5A/Power contact. The temperature rise above ambient shall not exceed 30°C the ambient condition is still air at 25°C. |

| MECHANICAL | | |
|---|---|---|
| Item | Requirement | Test Condition |
| Contact Normal Force | 0.3N Min. per Pin | Take contact insert molding semi-finished products, no other parts, and solder on PCB, measure contact normal force at the speed rate of 25 mm/min. (use 0.6mm card thickness) |
| Durability | 5000 cycles, Push-Push function is normal, the card can be withdrawn smoothly. Final Contact Normal Force 0.3N Min. | Use manual operation, Solder connectors to PCB, 400 to 600 cycles per hours (EIA364-09) |
| Tray Insertion Force (with card) | 10N max. | Measure the force required to mate connector.<br>Operation Speed： 25 mm/min.<br>(EIA-364-13B) |
| Tray Withdrawal Force (with card) | 2N min. | Measure the force required to mate connector.<br>Operation Speed： 25 mm/min.<br>(EIA-364-13B) |

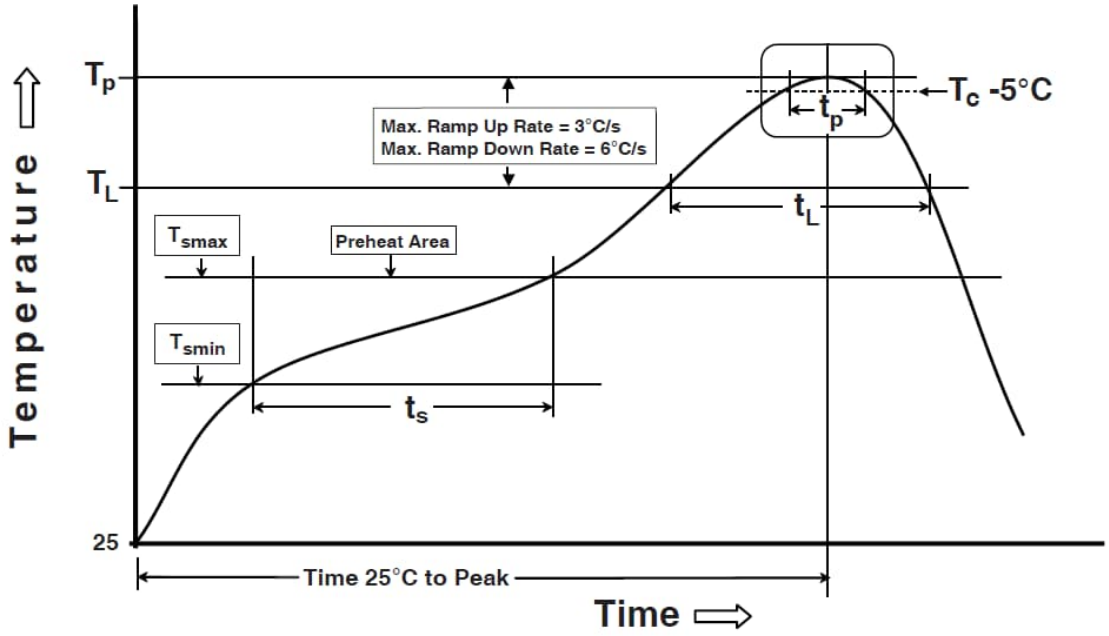
立威科技股份有限公司 Attend Technology Inc.
新北市汐止區新台五路一段81號10樓之六
10F-6, No.81, Sec.1, Xintai 5th Rd., Xizhi-Dist., New Taipei City 221, Taiwan, R.O.C.
TEL 886 2 2698 7028 FAX 886 2 2698 7078 WEBSITE www.attend.com.tw

| ENVIRONMENTAL | | |
|---|---|---|
| Item | Requirement | Test Condition |
| Vibration | Discontinuity < 1 ms | EN60721-3-5 Class 5M3 Random vibration Test (3.38Grms) 10~500Hz, 3.38Grms, 1hr/per axis<br>Test PSD: 10~200HZ: $3m^2/S^3$, 200~500Hz, $1m^2/S^3$ |
| Mechanical Shock | Discontinuity < 1 ms | EN60721-3-5 Class 5M3 Shock Test-Level II (100G/6ms) |
| Temperature Life | Contact resistance 100 mΩ Max. | 105±2°C<br>Mated, series between samples, loading 5VDC/60mA, duration 96 hours<br>(EIA-364-17, method B, condition 4) |
| Thermal Shock | Max. Change from initial contact<br>Resistance 40mΩ Max<br>No physical damage to connector shall occur. | Temperature Range: -55 to 85°C<br>No. of Cycles: 5 cycles for 30 minutes<br>(EIA364-32) |
| Cold Resistance | Contact resistance 100 mΩ Max. | -40°C/96Hr<br>(EIA-364-59) |
| Humidity | Meets ELECTRICAL requirements | Temperature : 70±2°C<br>Relative humidity : 90~95%<br>Duration : 96 hours |
| Salt Water Spray | No oxidation<br>Contact resistance 100 mΩ Max. | Temperature : 35±2°C<br>Salt water density : 5±1%<br>Duration : 48 hours |

| 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<br>Solder temperature: 255±5°C<br>Test time: 5±1 seconds, (Per EIA-364-71) |
| Resistance to soldering heat | No melting, cracks or functional damage allowed | Preheating temperature: 150 ~ 200°C, 60~120 seconds<br>Liquidus temperature (TL): 217°C, 60~150 seconds<br>Peak temperature: 260°C<br>Time within 5 °C of peak temperature (Tc): 255°C, 30seconds |

立威科技股份有限公司 Attend Technology Inc.
新北市汐止區新台五路一段81號10樓之六
10F-6, No.81, Sec.1, Xintai 5th Rd., Xizhi-Dist., New Taipei City 221, Taiwan, R.O.C.
TEL 886 2 2698 7028 FAX 886 2 2698 7078 WEBSITE www.attend.com.tw

# Reflow Profile




Preheating temperature: 150 ~ 200°C, 60~120 seconds
Liquidus temperature (TL): 217°C, 60~150 seconds
Peak temperature: 260°C
Time within 5 °C of peak temperature (Tc): 255°C, 30seconds

ATTEND
Connect to Your Success

立威科技股份有限公司 Attend Technology Inc.
新北市汐止區新台五路一段81號10樓之六
10F-6, No.81, Sec.1, Xintai 5th Rd., Xizhi-Dist., New Taipei City 221, Taiwan, R.O.C.
TEL 886 2 2698 7028 FAX 886 2 2698 7078 WEBSITE www.attend.com.tw

## Test Group & Sequence:

| NO. | TEST ITEM | TEST GROUP & SEQUENCE | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| | | A | B | C | D | E | F | G | H | I | J |
| 1 | Examination of Product | 1,8 | 1,6 | 1,3 | 1,7 | 1,6 | 1,10 | 1,6 | 1,8 | 1,3 | 1,3 |
| 2 | Low Level Contact Resistance | 3,5 | 3,5 | | 3,6 | 3,5 | 3,7 | 3,5 | | | |
| 3 | Dielectric Withstanding Voltage | | | | | | 4,8 | | 3,6 | | |
| 4 | Insulation Resistance | | | | | | 5,9 | | 4,7 | | |
| 5 | Temperature Rise | | 4 | | | | | | | | |
| 6 | Contact Normal Force | | | 2 | | | | | | | |
| 7 | Durability | 4 | | | | | | | | | |
| 8 | Insertion Force | 6 | | | | | | | | | |
| 9 | Withdrawal Force | 7 | | | | | | | | | |
| 10 | Vibration | | | | 5 | | | | | | |
| 11 | Mechanical Shock | | | | 4 | | | | | | |
| 12 | Temperature Life | | | | | 4 | | | | | |
| 13 | Thermal Shock | | | | | | 6 | | | | |
| 14 | Cold Resistance | | | | | | | 4 | | | |
| 15 | Humidity | | | | | | | | 5 | | |
| 16 | Salt Water Spray | | | | | | | | | 2 | |
| 17 | Solderability | | | | | | | | | | 2 |
| 18 | Reflow Soldering Heat Resistance | 2 | 2 | | 2 | 2 | 2 | 2 | 2 | | |
| Quantities of Samples | | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |