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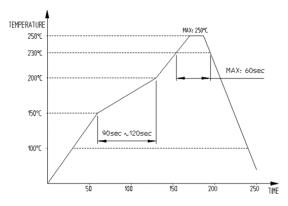
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| icable et | andard | Universal Se | erial Bus | Type-C | Cable an | d Conne | ctor Spec | cification Release 2.2 | | | |
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| | Voltage | 48V AC/DC | 48V AC/DC | | | | | | | | |
| tina | | 1.25A max | . for ea | ch pow | er pin (| i.e., A1 | , A4, A9 | , A12, B1, B4, B9, B12) | | | |
| ung | Current | 1.25A max. for Vcon pin (i.e., B5) | | | | | | | | | |
| | | 0.25A max. for the others. | | | | | | | | | |
| Operating condition -40℃~+105℃(Including temp. rise), 95% RH max.(N | | | | | | (.(Non-condensing) | | | | | |
| rage cor | ndition | -10℃~+60℃(With packing), 15%~70% RH | | | | | | | | | |
| t | icable st | - Initial relections icable standard Voltage Current | - Initial release icable standard Universal Secuniversal | - Initial release KYJ icable standard Universal Serial Bus Universal Se | - Initial release KYJ LHJ icable standard Universal Serial Bus Type-C (Universal Serial Bus Ty | - Initial release KYJ LHJ 22.12.16 Initial release KYJ LHJ 22.12.16 Universal Serial Bus Type-C Cable an Universal Serial Bus Type-C Connector 48V AC/DC 1.25A max. for each power pin (1.25A max. for Vcon pin (i.e., B5 0.25A max. for the others. Tating condition -40℃~+105℃(Including temp. rise | - Initial release KYJ LHJ 22.12.16 Universal Serial Bus Type-C Cable and Connectors and Connec | - Initial release KYJ LHJ 22.12.16 Universal Serial Bus Type-C Cable and Connector Specificable standard Universal Serial Bus Type-C Connectors and Cable Ass Voltage 48V AC/DC 1.25A max. for each power pin (i.e., A1, A4, A9) 1.25A max. for Vcon pin (i.e., B5) 0.25A max. for the others. Tating condition -40℃~+105℃(Including temp. rise), 95% RH max | Initial release KYJ LHJ 22.12.16 Universal Serial Bus Type-C Cable and Connector Specification Release 2.2 Universal Serial Bus Type-C Connectors and Cable Assemblies Compliance Docume Voltage 48V AC/DC 1.25A max. for each power pin (i.e., A1, A4, A9, A12, B1, B4, B9, B12) 1.25A max. for Vcon pin (i.e., B5) 0.25A max. for the others. Tating condition -40°C~+105°C(Including temp. rise), 95% RH max.(Non-condensing) | Initial release KYJ LHJ 22.12.16 Universal Serial Bus Type-C Cable and Connector Specification Release 2.2 Universal Serial Bus Type-C Connectors and Cable Assemblies Compliance Document Revision Voltage 48V AC/DC 1.25A max. for each power pin (i.e., A1, A4, A9, A12, B1, B4, B9, B12) 1.25A max. for Vcon pin (i.e., B5) 0.25A max. for the others. Tating condition -40°C~+105°C (Including temp. rise), 95% RH max.(Non-condensing) | Initial release KYJ LHJ 22.12.16 Universal Serial Bus Type-C Cable and Connector Specification Release 2.2 Universal Serial Bus Type-C Connectors and Cable Assemblies Compliance Document Revision 2.1b Voltage 48V AC/DC 1.25A max. for each power pin (i.e., A1, A4, A9, A12, B1, B4, B9, B12) 1.25A max. for Vcon pin (i.e., B5) 0.25A max. for the others. Tating condition -40°C~+105°C(Including temp. rise), 95% RH max.(Non-condensing) |

| SPECIFICATIONS | | | | | | | | | |
|----------------|------------------------------------|---|--|-------|--|-----------------------------|------------------|--------|--------|
| No | TEST ITEM | TEST METHO | TEST METHOD TEST REQUIREMENT | | | | | Q T | A T |
| CONS | STRUCTION | | | | | | | | |
| 1 | General Examination | EIA 364-18 Visual inspection | No n | | | | | | 0 |
| ELEC | TRICAL CHARACTERIS | TICS | | | | | | | |
| 2 | Low level contact resistance | EIA 364-23 Measure at 20mV max open cir at 100mA max. (DC or 1000Hz 4-wire measurement is required the resistance of PCB terminations shall be deducted from the reactions.) |) d and on | | | : 40mΩ max test : 50mΩ m | ax | 0 | - |
| 3 | Dielectric Withstanding Voltage | EIA 364-20 Measure per Method B with unmated condition. 100V AC RMS for 1 minute at sea level. | | | | sruptive discha | rge. | 0 | - |
| 4 | Insulation resistance | EIA 364-21 500V DC with unmated and ma | EIA 364-21 500V DC with unmated and mated condition. | | | Ω min. | | 0 | - |
| MECH | HANICAL CHARACTERI | STICS | | | | | | | |
| 5 | Insertion force | EIA 364-13 Measure at 12.5mm/minute mi (Perform 4 unplug / plug cycles, | | plug) | | : 5N ~ 20N test : 5N~20N | (with virgin plu | g) O | - |
| 6 | Extraction force | EIA 364-13 Measure at 12.5mm/minute mi (Perform 4 unplug / plug cycles, | | plug) | Initial: 8N ~ 20N After test: 6N~20N (with virgin plug) | | | | - |
| 7 | Durability | EIA 364-09 Mated 10,000 times Mechanically operated : 500cycles/hr Mating stroke : 2.75mm Insertion, extraction force shall be measured at a maximum speed of 12.5mm/min | | | | | 0 | - | |
| Rema | arks | | Drawn | Desi | gned | Checked | Approved | Relea | ise |

Designed Checked Approved S.K.JANG S.K.JANG H.J.LEE H.J.LEE 21.11.17 21.11.17 21.11.17 21.11.17 $[Note] \ QT: Qualification \ test, \ AT: Assurance \ test, \ O: Applicable, \ -: Not \ applicable$ Drawing No. CL No. Part No. ELC4-633514 CL 6248-0001-0 CX90M3-24P **K5** HIROSE KOERA.CO.,LTD PRODUCT SPECIFICATION

| 8 Random Vibration | | EIA 364-28 Test Condition VII, Test Letter D Mated specimens to 3.10 G's RMS between 20 to 500Hz 15 minutes in each of 3 mutually perpendicular planes. | No physical damage. No discontinuity of 1µs of longer duration when mated connector during test. | 0 | - | | | |
|--------------------|------------------------------------|--|---|---|---|--|--|--|
| ENVI | ENVIRONMENTAL CHARACTERISTICS | | | | | | | |
| 9 | Temperature Life | EIA 364-17, Method A 105℃ without applied voltage for 120 hours. | No physical damage. | 0 | - | | | |
| 10 | Cyclic Temperature and Humidity | EIA 364-31 25±3°C at 80±3% RH for 1 hour. 65±3°C at 50±3% RH for 1 hour. Thermal ramp: 0.5 hour Number of cycles: 24 cycles | No physical damage. | 0 | - | | | |
| 11 | Thermal Shock | EIA 364-32, Test Condition I 10 cycles -55°C and +105°C | No physical damage. | 0 | - | | | |
| 12 | Solderability | EIA 364-52 Dwell in 245±5℃ of the solder bath for 5 sec. | Solder coverage shall be 95% min. of the immersed surfaces. | 0 | - | | | |
| 13 | Salt Spray | EIA 364-26 Sample Condition: Reflow Soldered on PCB 5% of NaCl in 35℃ for 48 hours. | No corrosions that affect to the connector operation. | 0 | - | | | |
| 14 | Mixed Flowing Gas | EIA 364-65 Measure Environment 30°C/70%RH CL ₂ 10±3ppb, No ₂ 200±50ppb, H ₂ S 10±5ppb, SO ₂ 100±20ppb Expose half of sample mated for 1/3 days and then unmated for 2/3 days .The others are exposed mated for full 7 days test period. | No corrosions that affect to the connector operation. | 0 | - | | | |
| 15 | Temperature Rise | EIA-364-70, method B A current of 5.0 A shall be applied collectively to VBUS pins (i.e., pins A4, A9, B4, and B9) and 1.25 A applied to the Vconn pin (i.e., B5 of the plug connector) with the return path through the corresponding GND pins (i.e., pins A1, A12, B1,and B12). A minimum current of 0.25 A shall also be applied individually to all the other contacts. | Temperature rise shall not exceed 30℃ | 0 | - | | | |
| 16 | Reflow heat | Reflow profile [Fig.1] Peak 250°C max for 10 sec 2 times. | No deformation of mold No blister and popcorn | 0 | | | | |

REMARKS



[Fig.1] REFLOW TEMPERATURE

| [Note] QT : Qualification test, AT : Assurance test, O : Applicable, - : Not applicable | | | | | | | |
|---|--------|----------|-----------------|-----|--|--|--|
| Drawing No. | CL No. | Part No. | | | | | |
| ELC4-633514 | CL 624 | 8-0001-0 | CX90M3-24P | | | | |
| KS HIROSE KOERA.C | O.,LTD | PRODUC | T SPECIFICATION | 2/3 | | | |

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| Test Sequence Table | | | | | | | | | | |
|---------------------|------------------------------------|------|------------|---------|---------|-------|------|------|------|--|
| No | Test item | | Test Group | | | | | | | |
| NO | restitem | Α | В | С | D | E | F | G | н | |
| 1 | Examination of product | 1, 6 | 1, 8 | 1, 7 | 1, 7 | 1, 14 | 1, 3 | 1, 6 | 1, 6 | |
| 2 | Low Level Contact Resistance | 3, 5 | 3, 5, 7 | 3, 4, 6 | 3, 4, 6 | 5, 13 | | 3, 5 | 3, 5 | |
| 3 | Dielectric Withstanding Voltage | | | | | 4, 12 | | | | |
| 4 | Insulation Resistance | | | | | 3, 11 | | | | |
| 5 | Insertion force | | | | | 6, 10 | | | | |
| 6 | Extraction force | | | | | 7, 9 | | | | |
| 7 | Durability | | | | | 8 | | | | |
| 8 | Random Vibration | | | 5 | | | | | | |
| 9 | Temperature Life | 4 | | | | | | | | |
| 10 | Cyclic Temperature and Humidity | | 6 | | | | | | | |
| 11 | Thermal Shock | | 4 | | | | | | | |
| 12 | Solderability | | | | | | 2 | | | |
| 13 | Salt Spray | | | | | | | 4 | | |
| 14 | Mixed Flowing Gas | | | | 5 | | | | | |
| 15 | Temperature Rise | | | | | | | | 4 | |
| 16 | Reflow Heat | 2 | 2 | 2 | 2 | 2 | | 2 | 2 | |
| DEMAR | 1/6 | | | | | | | | | |

REMARKS

1) Numbers in the table above indicate the sequence corresponding to each test group.

| [Note] QT : Qualification test, AT : Assurance test, O : Applicable, - : Not applicable | | | | | | | |
|---|-----------------------------|--------|---------------------|-----------------|-----|--|--|
| | Drawing No. CL No. Part No. | | | | | | |
| | ELC4-633514 | CL 624 | 8-0001-0 | CX90M3-24P | | | |
| | KS HIROSE KOERA.C | O.,LTD | PRODUC ⁻ | T SPECIFICATION | 3/3 | | |