

REV	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	REV	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
2	-	REVISED	JS.PARK	HJ.LEE	16.08.03	4	-	REVISED	JS.PARK	HJ.KIM	16.12.07
3	-	REVISED	JS.PARK	HJ.LEE	16.10.12	5	2	REVISED	HJ.KIM	HJ.LEE	17.10.13

APPLICABLE STANDARD		USB Type-C Cable and Connector Specification Release 1.2 USB Type-C Connector and Cable Assemblies Compliance Document Revision 1.0									
RATING	5 CURRENT	DC 1.25A max. for each power pin (i.e. A1, A4, A9, A12, B1, B4, B5, B9, B12) DC 0.25A for the other pins									
	VOLTAGE	20VAC									
OPERATING CONDITION		-30℃ ~ +85℃ (INCLUDING TEMP. RISE), 95% RH MAX. (NON-CONDENSING)									
STORAGE CONDITION		-10℃ ~ +60℃ (WITH PACKING), 15% ~ 70% RH									

Para.	Test Description	Test Procedure	Test Requirement	QT	AT
1	Examination of product	EIA 364-18 Visual inspection	No physical damage	O	O
Electrical Requirements					
2	Low Level Contact Resistance	EIA 364-23 Measure at 20mV max open circuit at 100mA(DC OR 1000Hz). 4-wire measurement is required and the resistance of PCB termination shall be deducted from the reading.	40mΩ max initial for each contact. 50mΩ max after initial measurement.	O	-
3	Dielectric Withstanding Voltage	EIA 364-20 Measure per Method B with unmated condition. 100VAC RMS for 1 minute at sea level.	No distructive discharge.	O	-
4	Insulation Resistance	EIA 364-21 500VDC with unmated and mated condition.	100MΩ Min.	O	-
Mechanical Requirements					
5	Insertion force	EIA 364-13 Measure at 12.5mm/minute min.	5N to 20N	O	-
6	Extraction force	EIA 364-13 Measure at 12.5mm/minute min.	Initial : 8N to 20N After test : 6N to 20N	O	-
7	Durability	EIA 364-09 10,000 insertion/extraction cycles Cycle rate : 500±50 cycles per hour.	Low level contact resistance and dielectric withstanding voltage shall meet the spec after test.	O	-
8	Vibration	EIA 364-28 Test Condition VII, Test Letter D 20-500 Hz random levels, 15minutes in each of 3 mutually perpendicular directions.	No physical damage and no discontinuity longer than 1us. Low level contact resistance meets spec before and after the test.	O	-

REMARKS	DRAFT	DESIGN	CHECK	APPROVAL	RELEASE
	JS.PARK	JS.PARK	HJ.LEE	TS.KANG	
	16.08.03	16.08.03	16.08.03	16.08.03	

HIROSE will not guarantee the performance on these specifications in case this product will be mated with the others which is not HIROSE's 5

(NOTE) QT : QUALIFICATION TEST, AT : ASSURANCE TEST, O: Applicable Test

DWG NO	CL NO	PART NO
ELC4-631979	CL 6240-0001-9	CX60-24S-UNIT

 HIROSE KOREA.CO.,LTD	PRODUCT SPECIFICATION	1/3
---	-----------------------	-----

Para.	Test Description	Test Procedure	Test Requirement	QT	AT
Environmental Requirements					
9	Temperature Life	EIA 364-17, Method A 105°C without applied voltage for 120hours.	Low level contact resistance meets spec before and after the test.	O	-
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	Low level contact resistance meets spec before and after the test.	O	-
11	Thermal Shock	EIA 364-32, Test Condition I 10cycles -55°C and +85°C	No physical damage. Low level contact resistance meets spec before and after the test.	O	-
12	Damp Heat (Steady State)	+85°C and 85%RH for 120hours in mated condition.	No physical damage. Low level contact resistance meets spec before and after the test.	O	-
13	Solderability	EIA 364-52 Dwell in 245°C±5°C of the solder bath for 5sec.	Solder coverage shall be 95% min.of the immersed surfaces.	O	-
14	Salt Spray	EIA 364-26 5% of NaCl in 35°C for 48hours	No corrossions that affect to connector operation. Low level contact resistance meets spec before and after the test.	O	-
REMARKS					
NOTE) QT : QUALIFICATION TEST, AT : ASSURANCE TEST, O: Applicable Test DWG NO ELC4-631979 CL NO CL 6240-0001-9 PART NO CX60-24S-UNIT					
 HIROSE KOREA.CO.,LTD				PRODUCT SPECIFICATION 2 3	

Apr.1.2024 Copyright 2024 HIROSE ELECTRIC CO., LTD. All Rights Reserved.
In case of consideration for using Automotive equipment / device which demand high reliability, kindly contact our sales window correspondents.

Qualification Test Sequence Table										
Para.	Test Description	Test Group								
		A	B	C	D	E	F	G	H	
1	Examination of product	O	O	O	O	O	O	O	O	
2	Low Level Contact Resistance	O	O	O	O	O	O		O	
3	Dielectric Withstanding Voltage		O							
4	Insulation Resistance		O							
5	Insertion force		O							
6	Extraction force		O							
7	Durability		O							
8	Vibration	O								
9	Temperature Life			O						
10	Cyclic Temperature and Humidity				O					
11	Thermal Shock					O				
12	Damp Heat (Steady State)						O			
13	Solderability							O		
14	Salt Spray								O	
REMARKS										
1) Numbers in the table above indicate the sequence corresponding to each test group.										
NOTE) QT : QUALIFICATION TEST, AT : ASSURANCE TEST, O: Applicable Test										
DWG NO			CL NO				PART NO			
ELC4-631979			CL 6240-0001-9				CX60-24S-UNIT			
HRS HIROSE KOREA.CO.,LTD					PRODUCT SPECIFICATION					3/3