




May.1.2020 Copyright 2020 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.

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°C ~ +85°C (INCLUDING TEMP. RISE), 95% RH MAX. (NON-CONDENSING)									
STORAGE CONDITION		-10°C ~ +60°C (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			0	0	
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.			0	-	
3	Dielectric Withstanding Voltage		EIA 364-20 Measure per Method B with unmated condition. 100VAC RMS for 1 minute at sea level.			No disruptive discharge.			0	-	
4	Insulation Resistance		EIA 364-21 500VDC with unmated and mated condition.			100MΩ Min.			0	-	
Mechanical Requirements											
5	Insertion force		EIA 364-13 Measure at 12.5mm/minute min.			5N to 20N			0	-	
6	Extraction force		EIA 364-13 Measure at 12.5mm/minute min.			Initial : 8N to 20N After test : 6N to 20N			0	-	
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.			0	-	
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.			0	-	
REMARKS					DRAFT	DESIGN	CHECK	APPROVAL	RELEASE		
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					JS.PARK 16.08.03	JS.PARK 16.08.03	HJ.LEE 16.08.03	TS.KANG 16.08.03			
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					
						PRODUCT SPECIFICATION				1/3	

May.1.2020 Copyright 2020 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.

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 <table border="1" style="float: right; margin-left: 20px;"> <tr> <td style="text-align: center;">2</td> </tr> <tr> <td style="text-align: center;">3</td> </tr> </table>		2	3
2							
3							

May.1.2020 Copyright 2020 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 ELC4-631979	CL NO CL 6240-0001-9	PART NO CX60-24S-UNIT