


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	5	2	REVISED	HJ.KIM	HJ.LEE	16.12.07
3	-	REVISED	JS.PARK	HJ.LEE	16.10.12	6	6	REVISED	SY.PARK	HJ.LEE	17.11.28
4	-	REVISED	JS.PARK	HJ.KIM	16.12.07	7	-	REVISED	YG.KIM	HJ.LEE	21.08.31


APPLICABLE STANDARD		Universal Serial Bus Type-C Cable and Connector Specification Release 2.1 Universal Serial Bus Type-C Connectors and Cable Assemblies Compliance Document Revision 2.1b	
RATING	CURRENT	1.25A max. for each power pin (i.e. A1, A4, A9, A12, B1, B4, B5, B9, B12) 0.25A for the other pins	
	VOLTAGE	20V AC/DC	
OPERATING CONDITION		-40℃ ~ +105℃ (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.	Initial : 5N to 20N After test : 5N to 20N (with virgin socket)	O	-
6	Extraction force	EIA 364-13 Measure at 12.5mm/minute min.	Initial : 8N to 20N After test : 6N to 20N (with virgin socket)	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 shall meet 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	

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


DWG NO	CL NO	PART NO
ELC4-631979-00	CL 6240-0001-9	CX60-24S-UNIT

 HIROSE KOREA.CO.,LTD	PRODUCT SPECIFICATION	1 / 3
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Para.	Test Description	Test Procedure	Test Requirement	QT	AT
Environmental Requirements					
9	Temperature Life	EIA 364-17, Method A 105℃ without applied voltage for 120hours.	Low level contact resistance shall meet spec before and after the test.	O	-
10	Cyclic Temperature and Humidity	EIA 364-31 25±3℃ at 80±3% RH for 1 hour. 65±3℃ at 50±3% RH for 1 hour. Thermal ramp : 0.5 hour Number of cycles : 24 cycles	Low level contact resistance shall meet spec before and after the test.	O	-
11	Thermal Shock	EIA 364-32, Test Condition I 10cycles -55℃ and +105℃	No physical damage. Low level contact resistance shall meet spec before and after the test.	O	-
12	Damp Heat (Steady State)	+85℃ and 85%RH for 120hours in mated condition.	No physical damage. Low level contact resistance shall meet spec before and after the test.	O	-
13	Solderability	EIA 364-52 Dwell in 245℃±5℃ 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℃ for 48hours	No corrosions that affect to connector operation. Low level contact resistance shall meet spec before and after the test.	O	-
REMARKS					
NOTE) QT : QUALIFICATION TEST, AT : ASSURANCE TEST, O: Applicable Test					
DWG NO ELC4-631979-00		CL NO CL 6240-0001-9	PART NO CX60-24S-UNIT		
 HIROSE KOREA.CO.,LTD				PRODUCT SPECIFICATION	
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Qualification Test Sequence Table									
Para.	Test Description	Test Group							
		A	B	C	D	E	F	G	H
1	Examination of product	1, 5	1, 13	1, 5	1, 5	1, 5	1, 5	1, 3	1, 5
2	Low Level Contact Resistance	2, 4	2, 12	2, 4	2, 4	2, 4	2, 4		2, 4
3	Dielectric Withstanding Voltage		3, 11						
4	Insulation Resistance		4, 10						
5	Insertion force		5, 9						
6	Extraction force		6, 8						
7	Durability		7						
8	Vibration	3							
9	Temperature Life			3					
10	Cyclic Temperature and Humidity				3				
11	Thermal Shock					3			
12	Damp Heat (Steady State)						3		
13	Solderability							2	
14	Salt Spray								3
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 ELC4-631979-00			CL NO CL 6240-0001-9			PART NO CX60-24S-UNIT			
 HIROSE KOREA.CO.,LTD					PRODUCT SPECIFICATION				3 3