

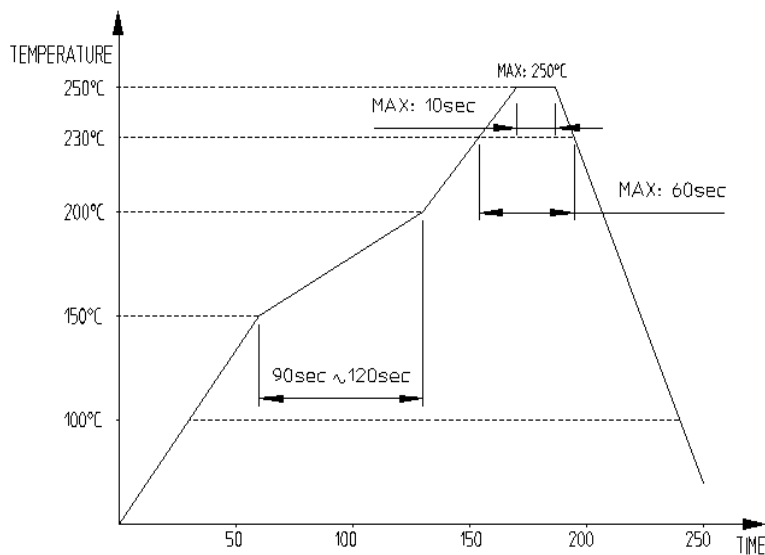


REV	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE	REV	COUNT	DESCRIPTION OF REVISIONS	BY	CHKD	DATE
①	-	Revised	LSH	LHJ	18.03.30						
②	-	Revised	LSH	LHJ	18.04.09						
APPLICABLE STANDARD			USB Type-C Cable and Connector Specification Release 1.3								
RATING	CURRENT		DC 1.50A max. for Vbus & GND (i.e. A1, A4, A9, A12, B1, B4, B5, B9, B12) DC 0.25A for the other pins								
	VOLTAGE		20V AC								
OPERATING CONDITION			-40℃ ~ +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 20 mV max open circuit at 100 mA (DC OR 1000 Hz). 4-wire measurement is required and the resistance of PCB termination shall be deducted from the reading.			Initial : 40mΩ max for each contact After test : 50mΩ max for each contact			O	-	
3	Dielectric Withstanding Voltage		EIA 364-20 Measure per Method B with unmated condition. 100V AC RMS for 1 minute at sea level.			No disruptive discharge.			O	-	
4	Insulation Resistance		EIA 364-21 500V DC with unmated and mated condition.			100MΩ min.			O	-	
Mechanical Requirements											
5	Insertion force		EIA 364-13 Measure at 12.5 mm/minute min.			Initial & after test : 5N ~ 20N			O	-	
6	Extraction force		EIA 364-13 Measure at 12.5 mm/minute min.			Initial : 8N ~ 20N After test : 6N ~ 20N (with virgin plug)			O	-	
7	Durability		EIA 364-09 Mated 10,000 times Mechanically operated : 500 cycles/hr Mating stroke : 2.75 mm Insertion, extraction force shall be measured at a maximum speed of 12.5 mm/min			① No physical damage. ② Insertion force - Initial & after test : 5N ~ 20N ③ Extraction force - Initial : 8N ~ 20N - After test : 6N ~ 20N (with virgin plug)			O	-	
8	Random Vibration		EIA 364-28 Test Condition VII, Test Letter D Mated specimens to 3.10 G's RMS between 20 to 500 Hz 15 minutes in each of 3 mutually perpendicular planes.			① No physical damage. ② No discontinuity of 1us of longer duration when mated connector during test.			O	-	
REMARKS					DRAFT	DESIGN	CHECK	APPROVAL	RELEASE		
Unless otherwise specified refer to the specification for USB Type-C, EIA364					S.Y.PARK 17.11.14	S.Y.PARK 17.11.14	H.J.LEE 17.11.14	TS.KANG 17.11.14			
NOTE) QT : QUALIFICATION TEST, AT : ASSURANCE TEST, O : Applicable Test											
DWG NO			CL NO			PART NO					
ELC4-632317			CL 6240-0008-8			CX90M-16P					
						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 120 hours.	No physical damage.	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	No physical damage.	O	-
11	Thermal Shock	EIA 364-32, Test Condition I 10 cycles -55 °C and +85 °C	No physical damage.	O	-
12	Solderability	EIA 364-52 Dwell in 245±5 °C of the solder bath for 5 sec.	Solder coverage shall be 95% min. of the immersed surfaces.	O	-
13	Salt Spray	EIA 364-26 5 % of NaCl in 35 °C for 48 hours.	No corrossions that affect to the connector operation.	O	-
14	Reflow test	Reflow profile [Fig.1] Peak 250 °C max for 10 sec 2 times.	① Co-planarity Before & after Reflow 0.1 max. ② No deformation of mold ③ No shape of blister and popcorn	O	-

REMARKS



[Fig.1] REFLOW TEMPERATURE

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

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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	1	1	1	1	1	1	1
2	Low Level Contact Resistance	2, 4	2, 10	2, 4	2, 4	2, 4		2, 4	
3	Dielectric Withstanding Voltage		3, 11						
4	Insulation Resistance		4, 12						
5	Insertion force		5, 8						
6	Extraction force		6, 9						
7	Durability		7						
8	Random Vibration	3							
9	Temperature Life			3					
10	Cyclic Temperature and Humidity				3				
11	Thermal Shock					3			
12	Solderability						2		
13	Salt Spray							3	
14	Reflow Test								2

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 ELC4-632317	CL NO CL 6240-0008-8	PART NO CX90M-16P
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