Rev.	Count	Description of rev.	BY	CHKD	Date	Rev.	Count	Description of rev.	BY	CHKD	Date

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	Voltage	48V AC/DC
	Current	1.5A 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.
Operating condition		-40℃~+105℃(Including temp. rise), 95% RH max.(Non-condensing)
Storage condition		-10℃~+60℃(With packing), 15%~70% RH

SPECIFICATIONS

No	TEST ITEM	TEST METHOD	TEST REQUIREMENT	QT	AT
CONSTRUCTION					
1	General Examination	EIA 364-18 Visual inspection	No physical damage	O	O
ELECTRICAL CHARACTERISTICS					
2	Low level contact resistance	EIA 364-23 Measure at 20mV max open circuit at 100mA max. (DC or 1000Hz) 4-wire measurement is required and the resistance of PCB termination shall be deducted from the reading.	Initial : 40mΩ max After test : 50mΩ max	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 CHARACTERISTICS					
5	Insertion force	EIA 364-13 Measure at 12.5mm/minute min.	Initial : 5N ~ 20N After test : 5N ~ 20N (with virgin plug)	O	-
6	Extraction force	EIA 364-13 Measure at 12.5mm/minute min.	Initial : 8N ~ 20N After test : 6N ~ 20N (with virgin plug)	O	-
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	No physical damage.	O	-
8	Random Vibration	EIA 364-28	No physical damage.	O	-

Remarks	Drawn	Designed	Checked	Approved	Release
	Y.J.KIM 22.06.28	Y.J.KIM 22.06.28	H.J.LEE 22.06.28	H.J.LEE 22.06.28	DEPT 22.06.28 ENG

[Note] QT : Qualification test, AT : Assurance test, O : Applicable, - : Not applicable

Drawing No.	CL No.	Part No.
ELC4-632813	CL 6240-0029-8	CX70M1-24P

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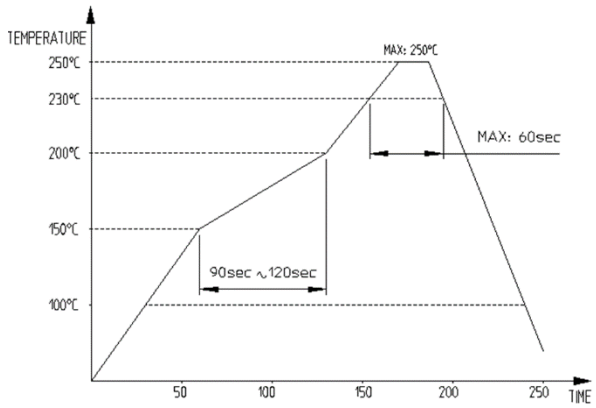
		Test Condition VII, Test Letter D Mated specimens to 3.10 G's RMS between 20 to 500Hz 15 minutes in each of 3 mutually perpendicular planes.	No discontinuity of 1μs of longer duration when mated connector during test.		
ENVIRONMENTAL CHARACTERISTICS					
9	Temperature Rise	EIA-364-70, method B : A current of 6.0 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℃	O	-
10	Temperature Life	EIA 364-17, Method A 105℃ without applied voltage for 120 hours.	No physical damage.	O	-
11	Cyclic Temperature and Humidity	EIA 364-31 25˚C~65˚C, 80~100% RH, 24hours a cycle, repeat 10 cycles	No physical damage.	O	-
12	Thermal Shock	EIA 364-32, Test Condition I 10 cycles -55˚C and +105˚C	No physical damage.	O	-
13	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.	O	-
14	Salt Spray	EIA 364-26 5% of NaCl in 35℃ for 48 hours.	No corrosions that affect to the connector operation.	O	-
15	Reflow test	Reflow profile [Fig.1] Peak 250˚C max for 10 sec 2 times.	Co-planarity Before&after Reflow 0.10max No deformation of mold No shape of blister and popcorn	O	-

REMARKS



[Fig.1] REFLOW TEMPERATURE

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Test Sequence Table

No	Test item	Test Group									
		A	B	C	D	E	F	G	H	I	J
1	Examination of product	1, 5	1, 13	1, 5	1, 5	1, 5	1, 3	1, 5	1, 3	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	Random Vibration	3									3
9	Temperature Rise									2	
10	Temperature Life			3							
11	Cyclic Temperature and Humidity				3						
12	Thermal Shock					3					
13	Solderability						2				
14	Salt Spray							3			
15	Reflow Test								2		

REMARKS

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