承　认　书

SPECIFICATION FOR APPROVAL

客　　户：佳 士 达
CUSTOMER

品　　名：USB A TYPE 8PIN 带弹片 CONN.
DESCRIPTION

客户料号：2B.12218.A91
BUYER P/N.

DLK 料号：USA42D-08BS1YN23
DLK P/N

客户承认意见栏 CUSTOMER APPROVED BY

昆山德力康电子科技有限公司
KUNSHAN DLK ELECTRONICS TECHNOLOGY CO.,LTD
地址：昆山市淀山湖镇黄浦江南路 278 号
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核准		审核		制作	邱宇	日期	2023 年 06 月 12 日

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Environmental management material don't use certificate

COMPONENT SPEC VERSION RECORD

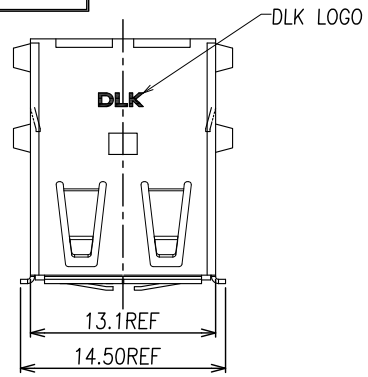
QISDA PART NO.	2B.12218.A91	DLK PART NO.	USA42D-08BS1YN23

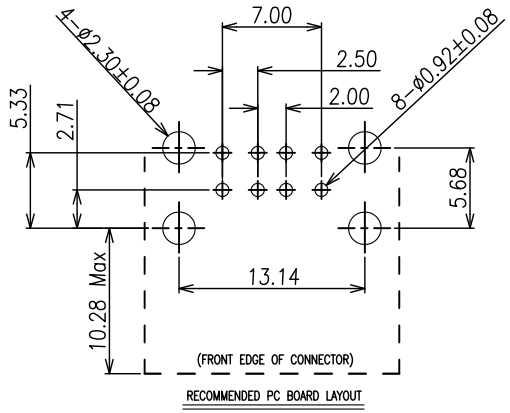
VER	MINUTE OF CHANGES	DLK CHECK	RELEASE DATE
A	CHECKED AND RELEASED	邱宇	2023-6-12
B	依客户要求端子长度由 2.8㎜ 改为 2.3㎜	邱宇	2023-07-06

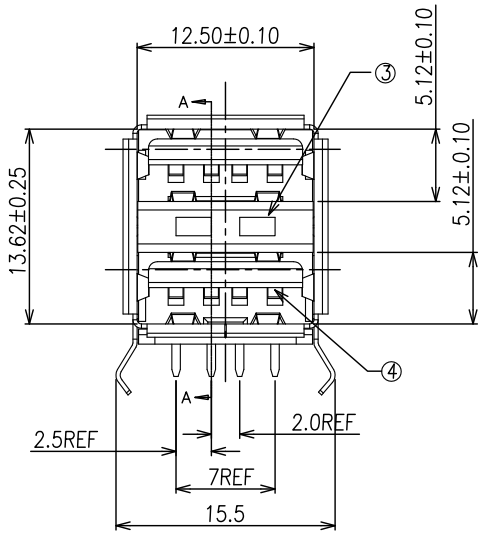
符合"DLK环境管理物质技术标准"

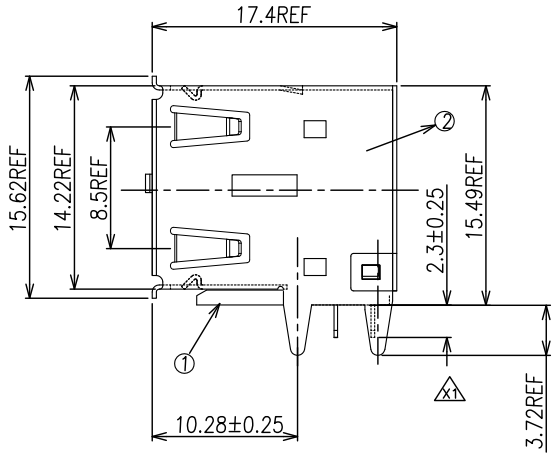
符合"USB协会标准"

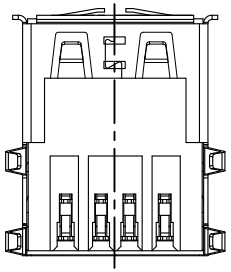
工程变更通知单 ECN(DCN) NO.	版本 REV	日期 DATE	说明 DESCRIPTION	变更 CHANGE	核准 APPRO.
————	X0	20230320	NEW	——	——
————	X1	20230706	依客户要求端子长度由2.8mm改为2.3mm ⚠X1		











NOTES:
1.MECHANICAL:
INITIAL MATING: 35N MAX.
INITIAL WITHDRAWAL: 10N MIN.
2.ELECTRICAL:
CURRENT: 1.5A MAX
VOLTAGE: 30V MAX
WITHSTANDING VOLTAGE: 500V AC
CONTACT RESISTANCE: 30 mΩ MAX
INSULATION RESISTANCE: 100MΩ MIN
3.ENVIRONMENTAL
TEMPERATURE RANGE −55°C ~ +85°C

NO.	ITEM	Q'TY	DESCRIPTION	FINISH
4	CONTACT	8	BRASS	Au PLATED
3	MIDDLE SHELL	1	SPCC	Ni PLATED
2	SHELL	1	SPCC	Ni PLATED
1	HOUSING	1	PBT	UL94V-0 BLACK

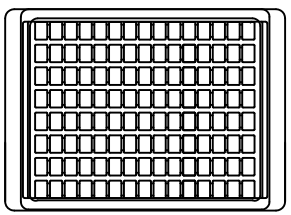
GENERAL TOLERANCE UNLESS OTHERWISE NOTED	
Angle	±5°
X.	±0.30
.X	±0.25
.XX	±0.15
.XXX	±0.10
A4	

德力康电子科技有限公司
DLK DELIKANG ELECTRONICS TECHNOLOGY CO.,LTD

C 名称 TITLE:	USB A TYPE 8PIN 带弹片 CONN.			
档案名称 FILE NAME.	C-USA42-00-03		料号 PART NO:	USA42D-08BS1YN23
DRAWING	蒋 召	CHECKED		APPROVED
UNIT:	mm	SCALE	1:1	SHEET: 1 of 1

符合"DLK环境管理物质技术标准"

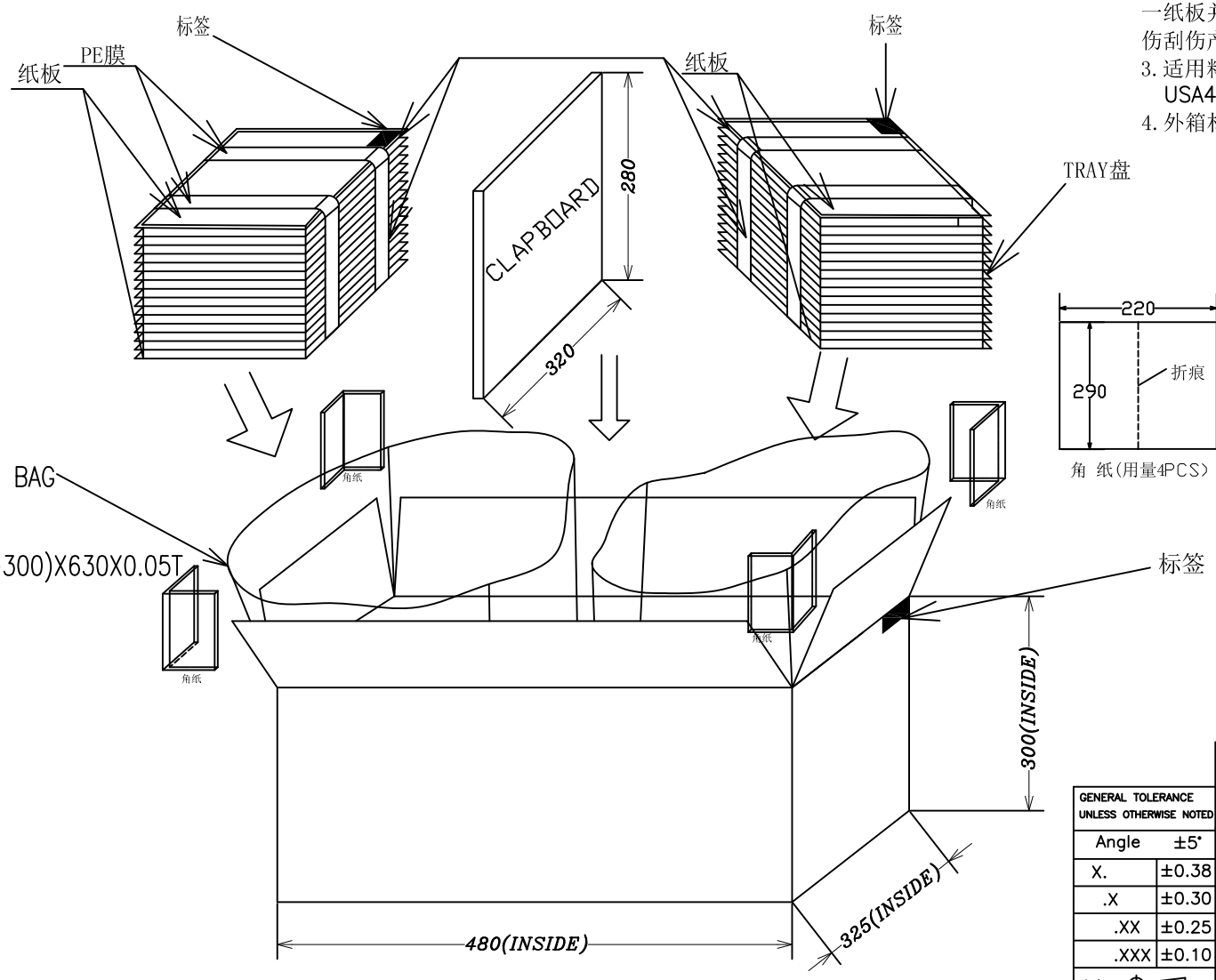
工程变更通知单 ECN(DCN) NO.	版本 REV	日期 DATE	说明 DESCRIPTION	改变 CHANGE	承认 APPRO.
———	X0	20210602	NEW	——	——



产品

包装说明：

1. 数量：
   一盘=100Pcs
2. 每一叠配一个上盖，在每叠产品右上角帖标签，每叠上下各放一纸板并用PE膜缠紧，封口后放入纸箱；包装过程中注意不可碰伤刮伤产品。
3. 适用料号：
   USA42D-08BS1YN23
4. 外箱材质K=K,要求破裂强度为6Kg.



角 纸(用量4PCS)

GENERAL TOLERANCE UNLESS OTHERWISE NOTED	
Angle	±5°
X.	±0.38
.X	±0.30
.XX	±0.25
.XXX	±0.10
A4	

德力康电子科技有限公司
DELIKANG ELECTRONICS TECHNOLOGY CO.,LTD

C	名称 TITLE:	USB A TYPE 8PIN 带弹片 包装图			
档案名称 FILE NAME.	C-USA42-00-03		料号 PART NO:	USA42D-08BS1YN23	
DRAWING	邱 宇	CHECKED		APPROVED	
UNIT:	mm	SCALE	1:1	SHEET: 1 of 1	

Material BOM List

料件名稱/料號 : USA42D-08BS1YN23

廠商名稱 : DLK

版本 Version :A

Customer P/N :2B.12218.A91

日期 Date : 2023-6-12

依循國際標準或是協會標準: 依据USB协会规范

項目 ITEM	部位 Position description	廠商名稱 supplier	底材材質 Bottom material	FLAME , UL NO	顏色,色碼 Color , Number	底材主要組成 Component of Bottom material	第一層材質 Material of first layer	鍍層濃度範圍 Plating layer thickness	第二層材質 Material of Second layer	鍍層濃度範圍 Plating layer thickness
1	Housing	TS/DLK	PBT	UL:E321019 UL94V-0	BLACK					
2	Contact	GT/DLK	C2680			Cu	Ni	50u"Min	接触端：Au 焊锡端：Matte Tin	接触端：1u"Min 焊锡端：100u"Min
3	Shell	HW/DLK	SPCC			Fe	Ni	40u"Min		
	MIDDLE SHELL	HW/DLK	SPCC			Fe	Ni	40u"Min		

Note = Paint thickness unit : u"

Approve:段国强　　Check:覃智森　　Prepare:邱宇

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PROSPECTOR® CLICK TO CONTINUE

View additional material information including performance and processing data

The information presented on the UL Prospector datasheet was acquired by UL Prospector from the producer of the material. UL Prospector makes substantial efforts to assure the accuracy of this data. However, UL Prospector assumes no responsibility for the data values and strongly encourages that upon final material selection, data points are validated with the material supplier.

Component - Plastics E321019

Guide Information

GUANGDONG HTASO NEW MATERIALS TECHNOLOGY CO., LTD

Tanwoling, Chizhukeng, Tangquan Forest Farm, Luoyang Town, Boluo County, Huizhou Guangdong CN

PBT T301 30 GF

Polybutylene Terephthalate (PBT), glass reinforced, furnished as pellets

Color	Min. Thk (mm)	Flame Class	HWI	HAI	RTI Elec	RTI Imp	RTI Str
NC, RD, BK	0.4	V-0	4	1	140	140	140
ALL	0.8	V-0	3	1	140	140	140
	1.6	V-0	2	1	140	140	140
	3.0	V-0	1	1	140	140	140

Comparative Tracking Index (CTI): 2

Dielectric Strength (kV/mm): 30

High-Voltage Arc Tracking Rate (HVTR): -

Dimensional Stability (%): -

Inclined Plane Tracking (IPT) kV: -

Volume Resistivity (10^x ohm-cm): 18

High Volt, Low Current Arc Resis (D495): -

ANSI/UL 94 small-scale test data does not pertain to building materials, furnishings and related contents. ANSI/UL 94 small-scale test data is intended solely for determining the flammability of plastic materials used in the components and parts of end-product devices and appliances, where the acceptability of the combination is determined by UL.

Report Date: 2013-03-28

Last Revised: 2018-02-12

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IEC and ISO Test Methods

Test Name	Test Method	Units	Thk (mm)	Value
Flammability	IEC 60695-11-10	Class (color)	0.4	V-0 (NC, RD, BK)
			0.8	V-0 (ALL)
			1.6	V-0 (ALL)
			3.0	V-0 (ALL)
Glow-Wire Flammability (GWFI)	IEC 60695-2-12	°C	0.4	960
			0.8	960
			1.6	960
			3.0	960
Glow-Wire Ignition (GWIT)	IEC 60695-2-13	°C	3.0	825
IEC Comparative Tracking Index	IEC 60112	Volts (Max)	-	-
IEC Ball Pressure	IEC 60695-10-2	°C	-	-
ISO Heat Deflection (1.80 MPa)	ISO 75-2	°C	-	-
ISO Tensile Strength	ISO 527-2	MPa	-	-
ISO Flexural Strength	ISO 178	MPa	-	-
ISO Tensile Impact	ISO 8256	kJ/m^2	-	-
ISO Izod Impact	ISO 180	kJ/m^2	-	-
ISO Charpy Impact	ISO 179-2	kJ/m^2	-	-

USB CONN 測試項目管控LIST

Item	測試項目	重點管控	備註
1	接觸電阻	≦ 30m OHM	
2	絕緣電阻	≧ 1000 M OHM	
3	耐電壓	500V AC 1min	
4	尺寸	符合規格要求	
5	外觀	無變形, 無破損,無污穢,無氧化	
6	Marking	清晰,完整	
7	插拔力	符合規格要求	
8	可焊性	Temperature 230 +/- 5℃ , Dip Time 5 +/- 0.5 sec. Requirement: 95 % COVERAGE以上	
9	耐焊接性	Temperature 260℃+/-5℃ Dip Time 10 +/- 0.5 sec Requirement: 符合RoHS 零件耐焊接熱標準	
ORT 測試			附出货检验报告
10	Salt Spray Test	Temperature : 35℃+/-2℃ Density: 5% , 48hr	接触区
11	Durability(耐插拔)	Insertion / Withdrawal 1500 cycles	
		Contact resistance: 30 mΩ Max.	
12	PIN 电镀厚度	符合规格要求	

PRODUCT SPECIFICATION

1.0 Applicable Connector: Applicable to DLK USB 2.0 Series connector.

（适用于德力康公司 USB 2.0系列连接器.）

Scope: This specification covers the requirements for product performance and test methods of DLK's USB Series Connectors of the part numbers specified as bellow.

（覆盖范围：此规格书内容含盖德力康公司 USB 系列连接器产品性能及测试方法。）

2.0 Rating（要求）：

2.1 Rated Voltage: ＜30 V AC,DC（额定电压：＜30 V）

2.2 Rated Current: 1.5 A（额定电流：1.5 A）

2.3 Electric Pressure: Keeping 60 second in AC 500V/1mA(耐压 500V AC 持续 60 秒）

2.4 Insulation Resistance: 1000 MΩ Min. in DC 500V(绝缘阻最小 1000 兆欧)

2.5 Contact Resistance: 30 mΩ Max. (接触阻抗最大 30 毫欧)

2.6 Temperature Range:-20℃ to +80℃.（适用温度范围：-20℃ 至 +80℃）

3.0 Test Condition（测试条件）:

All tests shall be performed as bellow conditions unless otherwise specified.

（所有的测试都在下列条件下完成，除非另有说明.）

3.1 Temperature range : +15℃to35℃. （ 温度：+15℃至 35℃）

3.2 Humidity range: 25%to85%.（湿度：25%至 85%）

3.3 Atmospheric Pressure : 860 to 1060 mber （大气压力： 860 至 1060 兆帕）

4.0 Mechanical Characteristics（机械性能）

4.1 Insertion Force(mating connector):3.57Kgf/Max;

4.2 Extraction Force(unmating connector):1.0Kgf/Min

5.0Test Methods and Requirements（测试方法和要求）：

5.1Examination of product（检查尺寸）：

Item (条目)	Test Description （测试内容）	Test Methods （测试方法）	Requirement （要求）
5.1.1	Examination of product Outward Appearance Structure （产品外形/尺寸检查）	Shall be confirm with eyes in accordance with each drawing. Shall be confirmed by using proper measuring instruments. （依照图面要求对产品目视检查，再用测量工具，按图面要求测量尺寸）	Outward appearance shall be good without such injurious problem structure shall be meet the design and dimensional requirements of drawing （外观良好，无任何有害问题；结构符合图面设计要求。）

5.2 Electrical performance（电气性能）：

Item (条目)	Test Description （测试内容）	Test Methods （测试方法）	Requirement （要求）
5.2.1	Contact Resistance （接触阻抗）	Mated connectors. Contact: measure by dry circuit, 20 mvolts maximum., 10mA Shell: measured by open circuit, 5 Volts maximum, 100mA. (ANSI/EIA-364-06A-83) （配对的连接器，端子在回路施加直流最大 20mV 10mA 的电流；铁壳在回路施加直流最大 5V 100mA 的电流；再测量相对应端子或铁壳的电阻值）	Excluding conductor resistance : 30 mΩ maximum. （接触阻抗最大不能超过 30 毫欧）
5.2.2	Insulation Resistance （绝缘阻抗）	Applied DC 500 Volts for 1minute between adjacent terminal. (ANSI/EIA 364-21, Method 302) （在相邻的端子间施加 DC 500V 的电压测试 1 分钟；）	1).Initial:1000MΩ minimum 2)After test:1000MΩ minimum （测试前最小为 1000 兆欧；测试后最小为 1000 兆欧）
5.2.3	Dielectric Strength （耐电压）	Applied AC 500 Volts and leak current 1mA for 1minute between adjacent terminal . (ANSI/EIA 364-20,Method 301) （在相邻的端子间施加 AC 500V 的电压与 1mA 漏电流测试 1 分钟；	500 V AC for one minute at sea level 1).No flashover or insulation breakdown 2).Leakage current: 0.5mA Maximum （500V 交流 1 分钟测试；无断裂击穿现象；漏电电流最大为 0.5 毫安）

5.3 Mechanical Performance（机械性能）：

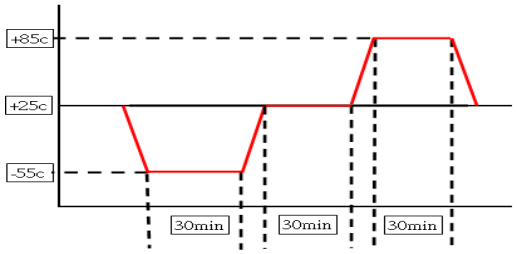
Item (条目)	Test Description （测试内容）	Test Methods （测试方法）	Requirement （要求）
5.3.1	Connector Insertion Force（插入力）	Solder each of the plug and receptacle connector to the P.C.Board then do insertion/extraction along the axis 3 times at speed 12.5mm. After place each of the P.C.Board onto the push-on/pull-off machine to be measurement the insertion force. (ANSI/EIA-364-13) （将公、母座焊接在 PCB 板上，再将 PCB 板置于插拔力实验机上，然后以每分钟 12.5mm 的速度沿轴向插拔 3 之次后再测试其插入力。）	Insertion force：3.57Kgf Max. 插入力： 3.57Kgf Max.

5.3.2	Connector Withdrawal Force （拔出力）	Solder each of the plug and receptacle connector to the P.C.Board then do insertion/extraction along the axis 3 times at speed 12.5mm. After place each of the P.C.Board onto the push-on/pull-off machine to be measurement the insertion force. (ANSI/EIA-364-13) （将公、母座焊接在 PCB 板上，再将 PCB 板置于插拔力实验机上，然后以每分钟 12.5mm 的速度沿轴向插拔 3 之次后再测试其拔出力。）	Withdrawal Force：1.0Kgf Min. 拔出力： 1.0Kgf Min.
5.3.3	Durability （寿命）	Solder each of the plug and receptacle connector to the P.C. Board,then place each of the P.C. Board onto the push-on/pull-off machine,then do insertion / Withdrawal 1500 cycles along the axis at speed of 200 ±50 cycles per hours （ANSI/EIA 364-09） （将公、母座焊接在 PCB 上，再将 PCB 板置于耐插拔实验机上，然后以每小时 200±50 次的速度沿轴向插拔 1500 次）	Contact resistance: 30 mΩ Max. （接触阻抗最大 30 毫欧）
5.3.4	Contact Retention Force （端子保持力）	The pull speed shall be 25mm to 100mm per min. （以每秒 25mm 到 100mm 的速度拉伸） （ANSI/EIA 364-35）	1.0Kgf or more per pin （ 保持力为 1.0Kgf）

4.4 Environmental Performance（环境性能）：

Item (条目)	Test Description （测试内容）	Test Methods （测试方法）	Requirement （要求）
5.4.1	Salt Spray （盐水喷雾）	Salt density:5% Temperature: 35± 2℃ 盐水浓度：5% 温度：35± 2℃ After keeping in above surrounding for 48 hours EIA-364-26	

膜厚類型	測試時間	判定
USB / DVI&D-SUB / DP CONN / HDMI / AC SOCKET		
鍍錫部位	24H	無氧化,銹蝕（端子焊脚镀锡处不作要求）
鍍錫之焊錫部位	24H	
金属件與非金屬/折彎處/切口	24H	
外部連接 port	48H	
接觸端鍍金(包含 15u"與 15u"以上)	48H	
接觸端鍍金(包含 15u"以下上)	48H	

5.4.2	Withstand humidity （恒温恒湿）	Solder each of the plug and receptacle connector to the P.C.Board ,then mate them together and exposed at temperature of 50℃±2℃ and humidity of 90-95% for a period of 96 hours. after removal from chamber, socket shall be returned at room condition for a period of 2 hours. the socket shall be capable of. （ANSI/EIA-364-31） （将公母座连接器各自焊接于 PCB 板上后将其对插再暴露在温度为 50℃±2℃，湿度为 90-95%的恒温恒湿槽中放置 96 小时进行测试，完成测试后将插座取回在常温常湿下放置 2 小时后测定。）	1）Appearance: no damage（外观无损害） 2）Contact resistance: 30 mΩ Max. （接触阻抗最大 30 毫欧） 3）Insulation resistance: 1000 megaohms minimum. （绝缘阻抗最小 1000 兆欧） 4）dielectric withstanding Voltage: AC 500V No Breakdown. （耐电压 AC 500V 测试无损坏）
5.4.3	Withstand heat （耐热）	The connector shall be exposed in a hot chamber at temperature of 85±2℃ for a period of 96 hours ,shall then be returned at room conditions for 2 hours. the socket shall be capable of satisfactory performance. （ANSI/EIA-364-17） (将连接器暴露在温度为 85±2℃的恒温恒湿槽中放置 96 小时后，再在室温下自然干燥 2 小时后，绝缘部分应无变形、裂痕、金属部分无变色。)	1）Appearance: no obvious damage on appearance and configuration （外观和构造无损坏） 2）Contact resistance: 30 mΩ Max. （接触阻抗最大 30 毫欧）
5.4.4	Withstand cold （耐寒）	The connector shall be exposed in a cold chamber at temperature of -25℃±2℃ for a period of 48 hours, shall then be returned at room conditions for 2 hours, the socket shall be capable of satisfactory performance. （ANSI/EIA-364-17） (将连接器暴露在温度为-25±2℃的恒温恒湿槽中放置 48 小时后，再在室温下自然干燥 2 小时后，绝缘部分应无变形、裂痕、金属部分无变色。)	1）Apearance: no obvious damage on appearance and configuration （外观和构造无损坏） 2）Contact resistance: 30 mΩ Max. （接触阻抗最大 30 毫欧）
5.4.5	Composite temperature/humidity cyclic （高低温循环）	The socket shall be subjected to the condition described below, for a total of 25 cycles, first step -40℃±3℃/0.5h, second step: 25℃±3℃/0.5h , third step: 85℃±3℃/0.5h （ANSI/EIA-364-17）  (在下列条件下持续进行 25 次循环测试,第一步：-40℃±3℃/0.5h，第二步：25℃±3 ℃/0.5h，第三步：85℃±3 ℃/0.5h)	1）Appearance: no damage（外观无损害） 2）Contact resistance: 30 mΩ Max. （接触阻抗最大 30 毫欧） 3）Insulation resistance: 1000 megaohms minimum. （绝缘阻抗最小 1000 兆欧） 4）dielectric withstanding Voltage: AC 500V No Breakdown. （耐电压 AC 500V 测试无损坏。）
5.4.6	Solderability （可焊性）	Immerse the solder pin of the connector in the solder bath at 230℃±5℃ for 5±0.5seconds. After dipped the pin in the flux for 5 seconds. （ANSI/EIA-364-52） （将端子脚浸入助焊剂中 5 秒，然后将端子脚浸入 230℃±5℃的锡炉中 5±0.5 秒.）	Solder wetting:95% of immersed area must show no voids，Pin holes. (粘锡面积：锡附着的面积应超过浸入表面积的 95%以上)

5.4.7	Resistance to soldering heat （耐焊接热）	1）Place the connector on the P.C.Board,then immerse the solder pin up to the surface of the board in the solder bath at 260℃±5℃ for 10 ±0.5seconds.（ANSI/EIA-364-52） (将连接器置于 PCB 上,然后将露出 PCB 板表面的 Pin 脚部分浸入 260±5℃的锡炉中 10 ±0.5 秒) 2）By soldering iron: Solder Temperature: 390±10℃	1）Without deformation of case or excessive lossen.(塑胶不得有明显变形或损坏) 2）Electrical characteristics shall be satisfied.(电气特性必须符合规格)
5.4.8	Vibration （振动）	Solder each of plug and receptacle connector to the P.C.Board,then mate them together.place the mated connector firmly on the vibrator and apply the following condition shall be done. Amplitude:1.5 mm P-P or 147m/s2 {15G} Vibration frequency:10Hz-55Hz-10Hz/minute. Direction:along three mutually perpendicular direction. Sweep time:two hours along each direction,a total six hours. Electrical load: DC 1mA current shall be flowed during the test. (ANSI/EIA-364-28) (将公母座各自焊接于 PCB 板上，然后将其对插再固定于振动机上，并施加下列条件) 振幅：1.5mm； 振动频率：一分钟内变换 10Hz-55Hz-10Hz； 方向：沿著三个互相垂直的方向； 时间：每个方向两小时，共 6 小时； 电力负载：施加 DC 1mA 电流测试。	1）No electrical discontinuity greater than 1 microsecond.shall occur. （电气上不能有超过 1 徼秒断讯的情形发生。） 2）Lossen,crack and breakage of the plastic part and other detrimental damage shall not be observed. （塑胶件不能有松脱破损或其它不利的损坏。） 3）Contact resistance: 30 mΩ Max. （接触阻抗最大 30 毫欧）

DLK ELECTRONICS TECHNOLOGY CO.,LTD

COMPONENT QUALIFICATION REPORT

PRODUCT: USB A TYPE 8PIN 带弹片 CONN

PART NO.: USA42D-08BS1YN23

REV. : A

RELIABILITY TEST RESULT:

■PASS □ NO PASS

APPROVED: Jia Wenqiang

CHECKED: N/A

TEST BY : Li Liqing

TEST SEQUENCE FOR ELECTRICAL COMPONENTS

CUSTOMER P/N :2B.12218.A91

SUPPLIER NAME :DLK ELECTRONICS TECHNOLOGY CO.,LTD

SUPPLIER P/N :USA42D-08BS1YN23

DATE : 2023-06-12 REV:A

1.Mechanical Dimension				Max	Min.	AVERAGE	CP/CPK	OK/NG	Page
1.1 Construction & Dimension	The following key Dimension are needed to measure based on Approved SPEC	5 PCS							
	1.Pin Length		2.3±0.25	2.29	2.20	2.30	/	OK	12
	2.Pin diameter dimension		N/A						
	3.Internal structure dimension of male and female matching		N/A						
	4. Pin electroplated thickness		OK						
	5.HDMI SMT Pin 平整度		N/A						
	6.USB CONN 需符合USB 規範要求		OK						
	7.DVI CONN 需符合DDWG 規範要求		N/A						
	8.D-SUB CONN 內部端子偏心量≦ 塑膠杯口1/3		N/A						
2.Electrical Characteristics									
2.1 Contact Resistance	20 mV / 10m A	20PCS	≦ 30m OHM	7.80	6.51	7.24	/	OK	3
2.2 Insulation Resistance	1000MΩ DC500V	20PCS	1000M OHM Min.	>1000M	>1000M	>1000M	/	OK	3
2.3 Withstand Voltage	AC500V 1min	20PCS	No breakdown	OK	OK	OK	/	OK	3
2.4 Rated Current	1.5A ＜30V	20PCS	1.5A ＜30V	OK	OK	OK	/	OK	3
3.Mechanical Characteristics									
3.1 Insertion Force	35N(3.57Kgf)Max	20PCS	35N(3.57Kgf)Max	1.27	1.13	1.17	/	OK	5
3.2 Withdrawal Force	10N(1.0Kgf)Min	20PCS	10N(1.0Kgf)Min	1.57	1.22	1.40	/	OK	5
3.3 Pin Retention Force	≥9.8N(1.0kgf)	20PCS	≥9.8N(1.0kgf)	1.59	1.05	1.46	/	OK	5
3.4 Terminal strength	9.8N(1.0kgf)	20PCS	9.8N(1.0kgf)	OK	OK	OK	/	OK	5
3.5 Durability	Mated and unmated 1500cycles Contact resistance after test : 30 mΩ(Max)	10PCS	Contact resistance : 30 mΩ(Max.)	9.80	7.82	8.78	/	OK	5

4.Environmental Test									
4.1 Cold Test	Temperature : -25 ± 2℃， 48 hr	5PCS	Contact resistance : 30 mΩ(Max.)	7.87	7.03	7.36	/	OK	6
4.2 Dry Heat Test	Temperature : 85 ± 2℃， 96 hr	5PCS	Contact resistance : 30 mΩ(Max.)	7.87	7.12	7.37	/	OK	7
4.3 Humidity Test	Temperature : 50℃+/-2℃，90-95%RH ，96hr	5PCS	Contact resistance : 30 mΩ(Max.)	7.76	7.22	7.40	/	OK	8
4.4 Temperature Cycle Test	Temperature : 1. -40℃+/-3℃ 30Min			7.75	7.25	7.51	/	OK	9
	2. 25℃ +/-3℃ 30Min								
	3. 85℃ +/-3℃ 30Min	5PCS	Contact resistance : 30 mΩ(Max.)						
	4. 25℃+/-3℃ 30Min								
	5 cycle								
4.5 Salt Spray Test	Temperature : 35℃+/-2℃ Density: 5% ， 48hr	5PCS	Contact resistance : 30 mΩ(Max.)	7.94	7.25	7.56	/	OK	10
4.6 Solder ability	Temperature 230℃ ±5℃	5PCS	95% coverage	OK	OK	OK	/	OK	11
	Dip Time 5 ±0.5 sec								
	Requirement: 95 % COVERAGE								
4.7 Resistance to soldering heat	Temperature ≧ 260±5℃	5PCS	Contact resistance : 30 mΩ(Max.)	7.75	7.07	7.50	/	OK	11
	Dip Time 10 ±0.5 sec		Insertion and Withdrawal Force meet approved spec	1.38	1.24	1.30	/		
	Requirement: Shall not be any abnormality		Pin Retention Force meet Approved spec	OK	OK	OK	/		

德力康电子科技有限公司

DLK ELECTRONICS TECHNOLOGY CO.,LTD

Construction & Dimension Test report

Part Description ： USB A TYPE 8PIN 带弹片 CONN.	Part NO：USA42D-08BS1YN23
Factory：DLK ELECTRONICS TECHNOLOGY CO.,LTD	Quantity：5PCS
Test Date：2023-06-02	Report Date：2023-6-12

Test result：befor test　　after test:

No	Item	1#	2#	3#	4#	5#	Request	Min.	Max.	Average	1#	2#	3#	4#	5#	Request	Min.	Max.	Average
1	Pin electroplated thickness(μ″)　Ni>50μ″	76.30	76.80	79.00	75.20	75.80		75.2	79.0	76.6									
2	Pin electroplated thickness(μ″)　Sn>100μ″	118.3	122.5	120.2	124.6	123.2		118.3	124.6	121.8									
3	Pin electroplated thickness(μ″)　Au>1μ″	3.47	3.12	4.77	3.69	3.36		3.12	4..77	3.18									
4	Shell electroplated thickness(μ″)　Ni>40μ″	79.7	81.9	81.9	80.8	82.9		79.7	82.9	81.4									

Conclusion：合格

TEST	CHECK	Remarks
Li Liqing	Jia Wenqiang	

德力康电子科技有限公司
DLK ELECTRONICS TECHNOLOGY CO.,LTD
Electrical Characteristics test report

Part Description : USB A TYPE 8PIN 带弹片 CONN.	Part NO: USA42D-08BS1YN23
Factory: DLK ELECTRONICS TECHNOLOGY CO.,LTD	Quantity: 20PCS
Test Date: 2023-06-02	Report Date: 2023-6-12

Test equipment: 电阻分选仪（2Y9622A）、兆欧表（ZC25B-3）、耐压测试仪（CS2672）Test conditions: .
Contact resistance(mΩ): 20mV/10mA ≤30mΩ; Insulation resistance(MΩ): DC500V 1000MΩ Min.; Withstand Voltagestrength (AC 500V for 1min.): 参照规格书，无异常 Approved Spec, No braekdown; Rated Current/Voltage: 1.5A ＜30V; There are no damage, Electrical performance Normal;

Test result: befor test

No	Item	1#	2#	3#	4#	5#	6#	7#	8#	9#	10#	Min.	Max.	Average
		11#	12#	13#	14#	15#	16#	17#	18#	19#	20#			
1	Contact resistance(≤30mΩ)	5.50	5.70	5.80	5.60	5.40	5.50	5.35	5.60	5.70	5.70	5.35	5.80	5.58
		5.50	5.40	5.60	5.50	5.50	5.80	5.75	5.40	5.80	5.40			
2	Insulation resistance(1000MΩ Min.)	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK			
3	Dielectric strength (AC 500V 1min)	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK			
4	Rated Current/Voltage 1.5A ＜30V	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK			

Conclusion: 合格

TEST	CHECK	Remarks
Li Liqing	Jia Wenqiang	

德力康电子科技有限公司
DLK ELECTRONICS TECHNOLOGY CO.,LTD
Electrical Characteristics test report

Part Description : USB A TYPE 8PIN 带弹片 CONN.	Part NO: USA42D-08BS1YN23
Factory: DLK ELECTRONICS TECHNOLOGY CO.,LTD	Quantity: 20PCS
Test Date: 2023-06-02	Report Date: 2023-6-12

Test equipment: 电阻分选仪（2Y9622A）、兆欧表（ZC25B-3）、耐压测试仪（CS2672） Test conditions: .
Contact resistance(mΩ): 20mV/10mA ≤30mΩ; Insulation resistance(MΩ): DC500V 1000MΩ Min.; Withstand Voltagestrength (AC 500V for 1min.): 参照规格书，无异常 Approved Spec, No braekdown; Rated Current/Voltage: 1.5A ＜30V; There are no damage, Electrical performance Normal;

Test result: after test

No	Item	1#	2#	3#	4#	5#	6#	7#	8#	9#	10#	Min.	Max.	Average
		11#	12#	13#	14#	15#	16#	17#	18#	19#	20#			
1	Contact resistance(≤30mΩ)	7.71	7.60	6.70	6.80	7.10	7.50	7.65	7.60	7.40	7.80	6.51	7.80	7.24
		7.50	7.41	7.60	6.70	6.51	6.80	7.40	7.52	6.80	6.60			
2	Insulation resistance(1000MΩ Min.)	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK			
3	Dielectric strength (AC 500V 1min)	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK			
4	Rated Current/Voltage 1.5A ＜30V	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK			

Conclusion: 合格

TEST	CHECK	Remarks
Li Liqing	Jia Wenqiang	

德力康电子科技有限公司
DLK ELECTRONICS TECHNOLOGY CO.,LTD
Mechanical Characteristics test report

Part Description : USB A TYPE 8PIN 带弹片 CONN.	Part NO: USA42D-08BS1YN23
Factory: DLK ELECTRONICS TECHNOLOGY CO.,LTD	Quantity: 20PCS
Test Date: 2023-06-02	Report Date: 2023-6-12

Test equipment: 插头plug、测力计Dynamometer（NK）、电阻分选仪（2Y9622A） Test conditions: Insertion and Withdrawal Force: Pin Retention Force (≥1.0Kg/f); Terminal strength: No braekdown, Approved Spec; Durability: Mated and unmated 1500 cycles , Contact resistance after test : 30 mΩ(Max.)

Test result: befor test

No	Item	1#	2#	3#	4#	5#	6#	7#	8#	9#	10#	Min.	Max.	Average
		11#	12#	13#	14#	15#	16#	17#	18#	19#	20#			
1	Insertion Force (3.57Kg/f Max)	1.20	1.30	1.30	1.50	1.40	1.20	1.32	1.20	1.30	1.20	1.20	1.50	1.30
		1.25	1.30	1.24	1.20	1.20	1.50	1.20	1.33	1.50	1.30			
2	Withdrawal Force (1.0Kg/f Min)	1.35	1.28	1.34	1.35	1.45	1.42	1.32	1.51	1.57	1.54	1.22	1.57	1.39
		1.28	1.50	1.43	1.48	1.22	1.28	1.24	1.32	1.55	1.44			
3	Pin Retention Force (≥1.0Kg/f)	1.45	1.46	1.47	1.35	1.36	1.38	1.39	1.52	1.53	1.54	1.05	1.59	1.46
		1.46	1.48	1.38	1.54	1.55	1.56	1.57	1.58	1.59	1.05			
4	Terminal strength	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK			
5	Durability (Contact resistance ≤30mΩ)	6.80	6.70	7.20	6.80	6.60	6.80	6.70	7.20	6.40	6.85	6.40	7.20	6.81

Conclusion: 合格

TEST	CHECK	Remarks
Li Liqing	Jia Wenqiang	

德力康电子科技有限公司
DLK ELECTRONICS TECHNOLOGY CO.,LTD
Mechanical Characteristics test report

Part Description : USB A TYPE 8PIN 带弹片 CONN.	Part NO: USA42D-08BS1YN23
Factory: DLK ELECTRONICS TECHNOLOGY CO.,LTD	Quantity: 20PCS
Test Date: 2023-06-02	Report Date: 2023-6-12

Test equipment: 插头plug、测力计Dynamometer（NK）、电阻分选仪（2Y9622A） Test conditions: Insertion and Withdrawal Force: Pin Retention Force (≥1.0Kg/f); Terminal strength: No braekdown, Approved Spec; Durability: Mated and unmated 1500 cycles , Contact resistance after test : 30 mΩ(Max.)

Test result: after test

No	Item	1#	2#	3#	4#	5#	6#	7#	8#	9#	10#	Min.	Max.	Average
		11#	12#	13#	14#	15#	16#	17#	18#	19#	20#			
1	Insertion Force (3.57Kg/f Max)	1.16	1.15	1.13	1.15	1.15	1.15	1.13	1.24	1.23	1.18	1.13	1.27	1.17
		1.24	1.27	1.18	1.15	1.13	1.18	1.16	1.14	1.15	1.18			
2	Withdrawal Force (1.0Kg/f Min)	1.35	1.28	1.34	1.35	1.46	1.42	1.32	1.55	1.57	1.54	1.22	1.57	1.40
		1.28	1.50	1.43	1.48	1.22	1.28	1.25	1.32	1.53	1.44			
3	Pin Retention Force (≥1.0Kg/f)	1.54	1.55	1.56	1.57	1.36	1.38	1.39	1.51	1.53	1.54	1.36	1.62	1.51
		1.39	1.52	1.53	1.54	1.55	1.56	1.57	1.58	1.62	1.48			
4	Terminal strength	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK	OK
		OK	OK	OK	OK	OK	OK	OK	OK	OK	OK			
5	Durability (Contact resistance ≤30mΩ)	9.80	8.70	9.20	9.30	8.70	9.40	8.70	8.20	7.82	8.00	7.82	9.80	8.78

Conclusion: 合格

TEST	CHECK	Remarks
Li Liqing	Jia Wenqiang	

德力康电子科技有限公司
DLK ELECTRONICS TECHNOLOGY CO.,LTD
Withstand Cold Test

Part Description : USB A TYPE 8PIN 带弹片 CONN.	Part NO: USA42D-08BS1YN23
Factory: DLK ELECTRONICS TECHNOLOGY CO.,LTD	Quantity: 5PCS
Test Date: 2023-06-02	Report Date: 2023-6-12

Test equipment: 6DS-100temperature ant humidity ever-constant chamber
Test conditions Keep it in the temperature and humidity ever-constant chamber of -25℃±2℃, for 48 hours then take it out and remove the water drops then after placing it 1～2hours on the atmospheric conditions go to test. Contact resistance after test : 30 mΩ(Max.) .

Test result: befor test / after test

No	Item	1#	2#	3#	4#	5#		Min.	Max.	Average	1#	2#	3#	4#	5#		Min.	Max.	Average
1	Outward appearance	OK	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK
2	Insulation resistance(1000MΩ Min.)	OK	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK
3	Dielectric strength (AC 500V 1min)	OK	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK
4	Contact resistance(30mΩ)	5.95	5.60	5.35	5.78	5.46		5.35	5.95	5.63	7.87	7.30	7.09	7.51	7.03		7.03	7.87	7.36
5	Insertion Force (3.57Kg/f)Max	1.45	1.45	1.41	1.50	1.42		1.41	1.50	1.45	1.22	1.21	1.32	1.23	1.23		1.21	1.32	1.24
6	withdrawal Force (1.0Kg/f)Min	1.55	1.53	1.54	1.57	1.58		1.53	1.58	1.55	1.27	1.34	1.21	1.32	1.23		1.21	1.34	1.27

Conclusion: 合格

TEST	CHECK	Remarks
Li Liqing	Jia Wenqiang	

德力康电子科技有限公司
DLK ELECTRONICS TECHNOLOGY CO.,LTD
Dry Heat Test

Part Description : USB A TYPE 8PIN 带弹片 CONN.	Part NO: USA42D-08BS1YN23
Factory: DLK ELECTRONICS TECHNOLOGY CO.,LTD	Quantity: 5PCS
Test Date: 2023-06-02	Report Date: 2023-6-12

Test equipment: 6DS-100temperature ant humidity ever-constant chamber
Test conditions Keep it in the temperature and humidity ever-constant chamber of 85℃±2℃, for 96 hours then take it out and remove the water drops then after placing it 2 hours on the atmospheric conditions go to test. Contact resistance after test : 30 mΩ(Max.)

Test result: befor test											after test								
No	Item	1#	2#	3#	4#	5#		Min.	Max.	Average	1#	2#	3#	4#	5#		Min.	Max.	Average
1	Outward appearance	OK	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK
2	Insulation resistance(1000MΩ Min.)	OK	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK
3	Dielectric strength (AC 500V 1min)	OK	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK
4	Contact resistance(30mΩ)	5.01	5.77	5.71	5.94	5.72		5.01	5.94	5.63	7.12	7.15	7.38	7.34	7.87		7.12	7.87	7.37
5	Insertion Force (3.57Kg/f)Max	1.45	1.49	1.40	1.47	1.43		1.40	1.49	1.45	1.29	1.33	1.23	1.38	1.37		1.23	1.38	1.32
6	withdrawal Force (1.0Kg/f)Min	1.57	1.53	1.50	1.53	1.57		1.50	1.57	1.54	1.28	1.30	1.39	1.35	1.24		1.24	1.39	1.31

Conclusion: 合格

TEST	CHECK	Remarks
Li Liqing	Jia Wenqiang	

德力康电子科技有限公司
DLK ELECTRONICS TECHNOLOGY CO.,LTD
Withstand Humidity Test

Part Description : USB A TYPE 8PIN 带弹片 CONN.	Part NO: USA42D-08BS1YN23
Factory: DLK ELECTRONICS TECHNOLOGY CO.,LTD	Quantity: 5PCS
Test Date: 2023-06-02	Report Date: 2023-6-12

Test equipment: 6DS-100temperature ant humidity ever-constant chamber
Test conditions: Keep it in the temperature and humidity ever-constant chamber of 50±2℃, 90-95%RH for 96 hours then take it out and remove the water drops, then after placing it 2 hours on the atmospheric conditions, go to test.Contact resistance after test : 30 mΩ(Max.)

Test result: befor test											after test								
No	Item	1#	2#	3#	4#	5#		Min.	Max.	Average	1#	2#	3#	4#	5#		Min.	Max.	Average
1	Outward appearance	OK	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK
2	Insulation resistance(1000MΩ Min.)	OK	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK
3	Dielectric strength (AC 500V 1min)	OK	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK
4	Contact resistance(30mΩ)	5.45	5.90	5.30	5.93	5.07		5.07	5.93	5.53	7.22	7.76	7.32	7.37	7.33		7.22	7.76	7.40
5	Insertion Force (3.57Kg/f)Max	1.46	1.46	1.40	1.40	1.45		1.40	1.46	1.43	1.39	1.26	1.33	1.23	1.35		1.23	1.39	1.31
6	withdrawal Force (1.0Kg/f)Min	1.51	1.59	1.51	1.55	1.57		1.51	1.59	1.55	1.40	1.27	1.36	1.38	1.33		1.27	1.40	1.35

Conclusion: 合格

TEST	CHECK	Remarks
Li Liqing	Jia Wenqiang	

德力康电子科技有限公司
DLK ELECTRONICS TECHNOLOGY CO.,LTD
Temperature cyclic Test

Part Description : USB A TYPE 8PIN 带弹片 CONN.	Part NO: USA42D-08BS1YN23
Factory: DLK ELECTRONICS TECHNOLOGY CO.,LTD	Quantity: 5PCS
Test Date: 2023-06-02	Report Date: 2023-6-12

Test equipment: temperature ant humidity ever-constant chamber
Test conditions:
5 cycles of following test. Keep it in the temperature -40±3℃ 30Min, Keep it in the temperature 25±3℃ 30Min, Keep it in the temperature 85±3℃ 30Min , Conversion transition temperature 25℃ time, 30Min。
After connector be left alone for 24 hours under the conditions of normal temperature and humidity, measure it.
Contact resistance after test : 30 mΩ(Max.).

Test result: / after test:

No	Item	1#	2#	3#	4#	5#		Min.	Max.	Average	1#	2#	3#	4#	5#		Min.	Max.	Average
1	Outward appearance	OK	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK
2	Insulation resistance(1000MΩ Min.)	OK	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK
3	Dielectric strength (AC 500V 1min)	OK	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK
4	Contact resistance(30mΩ)	5.94	5.13	5.25	5.46	5.41		5.13	5.94	5.44	7.38	7.57	7.75	7.59	7.25		7.25	7.75	7.51
5	Insertion Force (3.57Kg/f)Max	1.45	1.47	1.43	1.47	1.48		1.43	1.48	1.46	1.29	1.21	1.30	1.21	1.23		1.21	1.30	1.25
6	withdrawal Force (1.0Kg/f)Min	1.55	1.52	1.52	1.50	1.60		1.50	1.60	1.54	1.29	1.31	1.29	1.33	1.20		1.20	1.33	1.28

Conclusion: 合格

TEST	CHECK	Remarks

德力康电子科技有限公司

DLK ELECTRONICS TECHNOLOGY CO.,LTD

Salt spray test report

Part Description : USB A TYPE 8PIN 带弹片 CONN.	Part NO: USA42D-08BS1YN23
Factory: DLK ELECTRONICS TECHNOLOGY CO.,LTD	Quantity: 5PCS
Test Date: 2023-06-02	Report Date: 2023-6-12

Test equipment: Salt spray erode test box
Test conditions: Temperture: 35±2℃ Salt density: 5%
After keeping in above surrounding for 48 hours,take it in the standard atmospheric condition, then remove the foreign matters adhered and measure, Contact resistance after test : 30 mΩ(Max.) 。

Test result: befor test / after test:

No	Item	1#	2#	3#	4#	5#		Min.	Max.	Average	1#	2#	3#	4#	5#		Min.	Max.	Average
1	Outward appearance	OK	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK
2	Insulation resistance(1000MΩ Min.)	OK	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK
3	Dielectric strength (AC 500V 1min)	OK	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK
4	Contact resistance(30mΩ)	5.91	5.25	5.41	5.15	5.68		5.15	5.91	5.48	7.60	7.94	7.25	7.67	7.36		7.25	7.94	7.56
5	Insertion Force (3.57Kg/f)Max	1.42	1.48	1.48	1.49	1.50		1.42	1.50	1.47	1.24	1.36	1.22	1.36	1.30		1.22	1.36	1.30
6	withdrawal Force (1.0Kg/f)Min	1.56	1.59	1.51	1.53	1.55		1.51	1.59	1.55	1.21	1.34	1.36	1.24	1.30		1.21	1.36	1.29

Conclusion: 合格

TEST	CHECK	Remarks
Li Liqing	Jia Wenqiang	

德力康电子科技有限公司

DLK ELECTRONICS TECHNOLOGY CO.,LTD

Solder ability&Resistance to soldering heat Test report

Part Description : USB A TYPE 8PIN 带弹片 CONN.	Part NO: USA42D-08BS1YN23
Factory: DLK ELECTRONICS TECHNOLOGY CO.,LTD	Quantity: 5PCS
Test Date: 2023-06-02	Report Date: 2023-6-12

Test equipment: Thermostat tin furnace (TS-1500)、Life testing machine (CL-60-25)、
Test conditions: Solder-ability: 240℃～245℃ <3S >95%Composition of solder:96.5% Sn-3.0% Ag-0.5%Cu;
Solder heart resistance test: 260±5℃ 10±0.5S Obvious damage on appearance and Structure; Contact resistance after test : 30 mΩ(Max.)
Life test: , 200±50 cycles per minute Pin jack, 1500 cycles without load;
Rating: ＜36V DC 1.5A;

Test result: befor test / after test:

No	Item	1#	2#	3#	4#	5#		Min.	Max.	Average	1#	2#	3#	4#	5#		Min.	Max.	Average
1	Solder-ability >95%	OK	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK
2	Solder heart resistance test (Contact resistance 30mΩ)	5.16	5.23	5.22	5.07	6.00		5.07	6.00	5.34	7.74	7.47	7.07	7.45	7.75		7.07	7.75	7.50
3	Life test (Contact resistance 30mΩ)	5.20	5.36	5.35	5.69	5.93		5.20	5.93	5.51	8.00	7.97	7.45	7.06	7.02		7.02	8.00	7.50
4	Rated Current/Voltage 1.5A ＜36V	OK	OK	OK	OK	OK		OK	OK	OK	OK	OK	OK	OK	OK		OK	OK	OK
5	Insertion Force (3.57Kg/f)Max	1.43	1.48	1.47	1.45	1.43		1.43	1.48	1.45	1.27	1.24	1.27	1.36	1.38		1.24	1.38	1.30
6	withdrawal Force (1.0Kg/f)Min	1.53	1.59	1.55	1.51	1.53		1.51	1.59	1.54	1.24	1.25	1.22	1.25	1.33		1.22	1.33	1.26

Conclusion: 合格

TEST	CHECK	Remarks

DLK ELECTRONICS TECHNOLOGY CO.,LTD

Construction & Dimension Test report

A/0 No.: 12 of 12

Product Name: USA42 Model specifications: USB A TYPE The number of samples: 5Pcs

Acceptance time: ■New mode ☐ Design changes ☐ Repair mode ☐ Product testing

Serial number	Sample No. / Serial number / Specifications(mm)	1	2	3	4	5	AVERAGE	Measurement Tools	Test results
1	13.1±0.25	13.06	13.10	13.09	13.06	13.12	13.09	A	OK
2	14.50±0.15	14.54	14.52	14.54	14.52	14.46	14.52	A	OK
3	12.50±0.10	12.48	12.51	12.49	12.47	12.51	12.49	A	OK
4	13.62±0.25	13.59	13.66	13.66	13.64	13.65	13.64	A	OK
5	2.0±0.25	1.96	2.00	2.05	2.00	2.03	2.01	A	OK
6	2.5±0.25	2.51	2.53	2.47	2.52	2.50	2.51	A	OK
7	7±0.30	7.04	6.95	6.96	7.05	6.99	7.00	A	OK
8	5.12±0.10	5.13	5.12	5.12	5.12	5.12	5.12	A	OK
9	5.12±0.10	5.15	5.13	5.14	5.15	5.12	5.14	A	OK
10	15.62±0.15	15.57	15.64	15.58	15.59	15.67	15.61	A	OK
11	14.22±0.15	14.21	14.21	14.26	14.20	14.23	14.22	A	OK
12	8.5±0.25	8.46	8.48	8.46	8.45	8.53	8.48	A	OK
13	17.4±0.25	17.36	17.37	17.44	17.39	17.41	17.39	A	OK
14	10.28±0.25	10.32	10.27	10.32	10.27	10.28	10.29	A	OK
15	15.49±0.15	15.45	15.48	15.54	15.51	15.51	15.50	A	OK
16	2.3±0.25	2.21	2.26	2.23	2.26	2.21	2.24	A	OK
17	3.72±0.15	3.66	3.71	3.73	3.66	3.66	3.68	A	OK

Instrument code: A: projector (投影机) B: secondary element (二次元) C: vernier caliper (游标)

Remarks:

Test: Li Liqing check: Jia Wenqiang

环境管理物质不使用证书
（原材料及原材料厂家 **LIST**）

向贵司销售的零部件及组件的使用材料、包装材料等中未使用佳士达要求(RDEMS-01)的（禁止使用对象）及其用途，特此证明。
且：零部件及组件的使用在材料，由以下成分构成。特此报告

1. 零件料号：USA42D-08BS1YN23

以下清单所列均质原材料为本产品中所用到的所有原材料

ITEM	Raw Material	Raw Material Supplier	Cd	Pb	Cr^{6+}	Hg	PBB/PBDE	Cl	Br	PAHs	第三方测试报告号码
			含量(ppm)	含量(ppm)	含量(ppm)	含量(ppm)	含量(ppm)	含量(ppm)	含量(ppm)	含量(ppm)	
Housing	PBT	TS/DLK	N.D	6	N.D	N.D	N.D	N.D	1087		SHAEC23008867610
Contact	C2680	GT/DLK	N.D	33	N.D	N.D					CANEC23000500013
Shell/Middle Shell	SPCC	HW/DLK	N.D	N.D	N.D	N.D					SHAEC23008867626
Plating Au	Au	CF/DLK	N.D	N.D	N.D	N.D	N.D	N.D	N.D		TA0EC2304135201
Plating Ni	Ni	CF/DLK	N.D	N.D	N.D	N.D	N.D	N.D	N.D		TA0EC2304135203
Plating Matte Sn	Sn	CF/DLK	N.D	N.D	N.D	N.D	N.D	N.D	N.D		TA0EC2304135207

2、 ICP 测试对象物质（塑料（含橡胶）涂料、油墨和线材料中的镉和铅）测试要求的 ICP 数据另附。ICP 测试对象物质的成分表或 MSDS 另附。

备注：请填写该类零部件用到的所有部件、原材料、辅助材料的详细信息。

必须详细、正确的填写部件、原材料、辅助材料的供应商名称、材料型号

主管/职位：管理者代表

公司全称：德为康电子科技有限公司

公司公章：

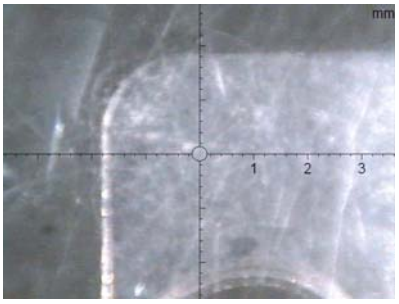
德力康电子科技有限公司
膜厚报告

Fischerscope XRAY XULM XYm

Product: Ni/Fe 申请单编号：

Application: Ni/ Fe 料号： 外壳

电镀规格：Ni:50 μ" Min



n= 1 Ni 1 = 79.7 μ"
n= 2 Ni 1 = 81.9μ"
n= 3 Ni 1 = 81.9μ"
n= 4 Ni 1 = 80.8 μ"
n= 5 Ni 1 = 82.9μ"

Mean	81.5μ"
Standard deviation	1.21 μ"
C.O.V. (%)	1.49
Range	3.16μ"
Number of readings	5
Min. reading	79.7μ"
Max. reading	82.9μ"
Measuring time	10 sec
Measuring result	OK

Measuring Date: 2023-6-9 Time: 16:20:48

核准：李啸军 审核：N/A Operator: 李莉清

德力康电子科技有限公司

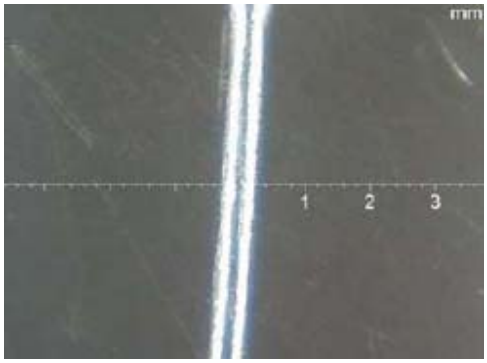
膜厚报告

Fischerscope　　XRAY XULM XYm

Product:　Sn/Ni/CuZn　　申请单编号：

Application: Sn/Ni/CuZn　　料号：端子

电镀规格：Sn 100μ" Min　Ni 50μ" Min



n=　1　Sn 1 =　118.3 μ"
n=　2　Sn 1 =　122.5μ"
n=　3　Sn 1 =　120.2 μ"
n=　4　Sn 1 =　124.6μ"
n=　5　Sn 1 =　123.2 μ"

Mean	121.8 μ"
Standard deviation	3.715 μ"
C.O.V. (%)	1.68
Range	9.45 μ"
Number of readings	5
Min. reading	118.3 μ"
Max. reading	124.6 μ"
Measuring time	10 sec
Measuring result	OK

Measuring Date:　2023-6-9　Time:　15:30:06

核准：贾文强　　审核：N/A　　Operator:　李莉清

德力康电子科技有限公司

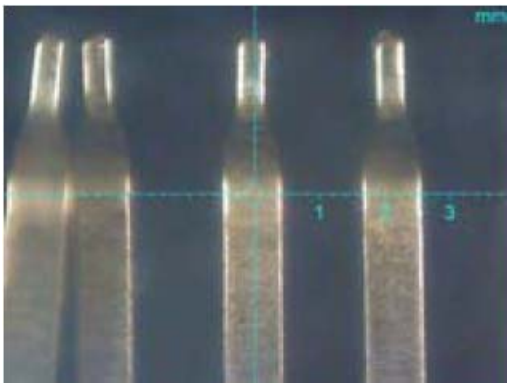
膜厚报告

Fischerscope　　XRAY XULM XYm

Product:　Au/Sn/Ni/CuZn　　申请单编号：

Application: Au/Sn/Ni/CuZn　　料号：端子

电镀规格：Au 1μ" Min　Sn 100μ" Min　Ni 50μ" Min



n=	1	Au 1 =	1.51 μ"	Ni 2 = 76.3 μ"
n=	2	Au 1 =	1.15 μ"	Ni 2 = 76.8 μ"
n=	3	Au 1 =	1.42 μ"	Ni 2 = 79.0 μ"
n=	4	Au 1 =	1.34 μ"	Ni 2 = 75.2 μ"
n=	5	Au 1 =	1.14 μ"	Ni 2 = 75.8 μ"

Mean	1.312 μ"	76.62 μ"
Standard deviation	0.164 μ"	1.457 μ"
C.O.V. (%)	12.49	1.90
Range	0.37 μ"	3.80 μ"
Number of readings	5	5
Min. reading	1.14μ"	75.2 μ"
Max. reading	1.51μ"	79.0 μ"
Measuring time	10 sec	
Measuring result	OK	

Measuring Date:　2023-6-9　Time:　14:10:09

核准：贾文强　　审核：N/A　　Operator:　李莉清