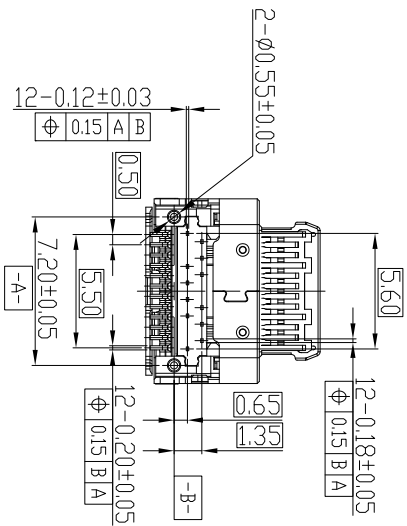
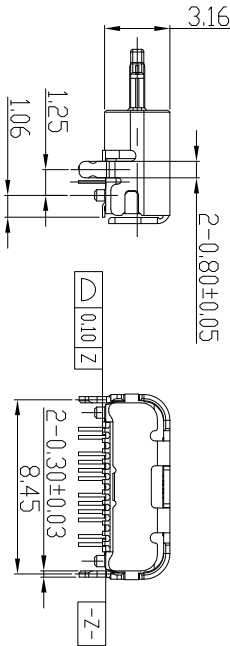
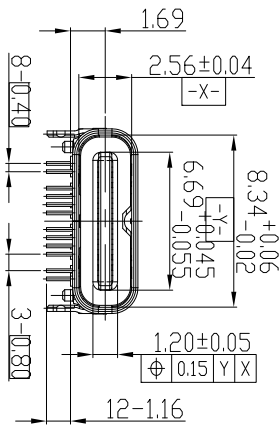
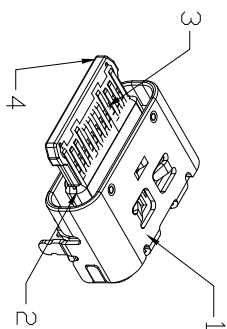
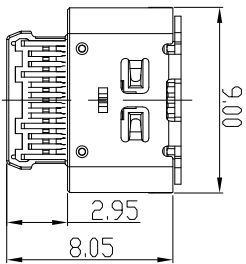


REV.	ECN NO.	DESCRIPTION	DRAW	APPD.	DATE
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NOTES:

1. Electrical characteristics:

1-1. Contact current rating:

A current of 5.0A shall be applied collectively to VBUS pins and 1.25A applied to the VCEN pin with the return path through the corresponding GND pins.

A MIN 0.25A shall be applied individually to all other contacts.

1-2. Contact resistance:

40 Milliohms (MAX) initial for VBUS, GND and all other contacts.

Maximum change (delta) of +10 Milliohms after environmental stresses.

1-3. Dielectric withstanding voltage : 100 V AC

MIN (RMS).

1-4. Insulation resistance: 100 MEGOHMS MIN.

2. Mechanical characteristics:

2-1. Connector insertion force: 5~20N at a maximum rate of 12.5mm per minute.

2-2. Connector extraction force: 8~20N up to 1000 mating cycles, and 6~20N

after the specified insertion/extraction or durability cycles at a maximum

rate of 12.5mm per minute

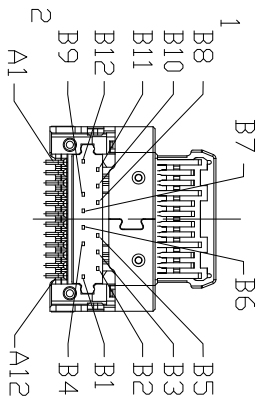
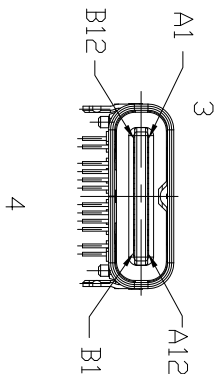
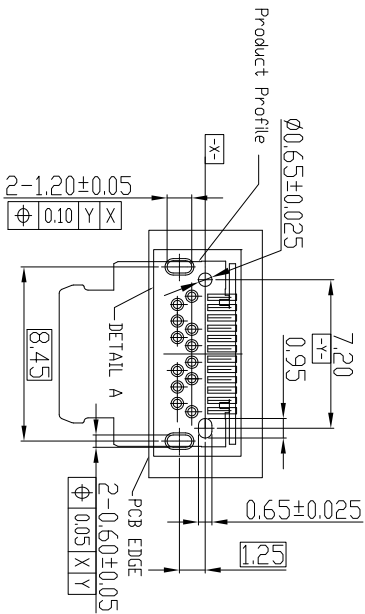
2-3. Durability: 10000 cycles minimum.

2-4. Operating temperature: -55°C TO +85°C

3. The connector is Rohs compliant and halogen free compliant.

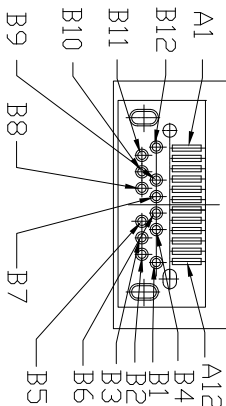
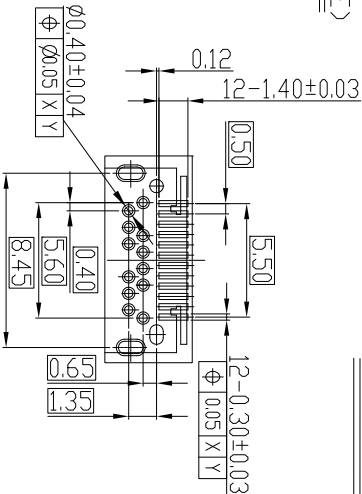
6	SHELL	SUS 304 T=0.30	NI Plated	1PCS
5	SHIELDING PLATE	SUS 304 T=0.25	NATURAL	1PCS
4	MD	HIGH TEMPERATURE RESISTANT PLASTIC	BLACK	1PCS
3	CONTACT	COPPER ALLOY	Au/Ni Plated	1SET
2	CONTACT	COPPER ALLOY	Au/Ni Plated	1SET
1	HOUSING	HIGH TEMPERATURE RESISTANT PLASTIC	BLACK	1PCS
NO.	DESCRIPTION	MATERIAL	REMARKS	QTY
TOLERANCE		NAME(INTENDED USE) CUSTOMER DRAWING		
X.X	±0.30	X.*	± 2°	PART NO.
.XX	±0.20	.X*	± 1°	USB-T024H25-321
.XXX	±0.10	.XX*	±0.5°	
UNITS	mm			
MATERIAL	APPD: ZYA			
FINISH	CHED: TANG			
	DRAW: SHI			
DRAWG NO.		SETD0353		
SCALE		1:1		
SHEET		1/2		
REV.		A		

REV.	ECN NO.	DESCRIPTION	DRAW	APPD.	DATE
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RECOMMENDED P.C.B LAYOUT (COMPONENT SIDE)

PCB THICKNESS: 1.00±0.05mm
DEFAULT TOLERANCE: ±0.05



PCB PIN DEFINITION

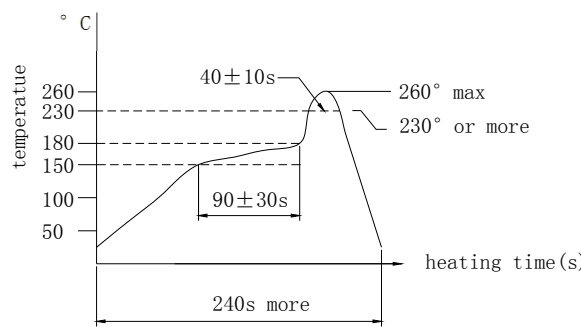
PIN ASSIGNMENT			
Pin No.	Signal Name	Pin No.	Signal Name
A1	GND	B12	GND
A2	TX1+	B11	RX1+
A3	TX1-	B10	RX1-
A4	VBUS	B9	VBUS
A5	CC1	B8	SBUS2
A6	D+	B7	D-
A7	D-	B6	D+
A8	SBUS1	B5	CC2
A9	VBUS	B4	VBUS
A10	RX2-	B3	TX2-
A11	RX2+	B2	TX2+
A12	GND	B1	GND

6	SHELL	SUS 304 T=0.30	NI Plated	1PCS
5	SHIELDING PLATE	SUS 304 T=0.25	NATURAL	1PCS
4	MD	HIGH TEMPERATURE RESISTANT PLASTIC	BLACK	1PCS
3	CONTACT	COPPER ALLOY	Au/Ni Plated	1SET
2	CONTACT	COPPER ALLOY	Au/Ni Plated	1SET
1	HOUSING	HIGH TEMPERATURE RESISTANT PLASTIC	BLACK	1PCS
NO.	DESCRIPTION	MATERIAL	REMARKS	QTY
TOLERANCE		NAME(INTENDED USE) CUSTOMER DRAWING		
X.X ±0.30 X.* ± 2°		PART NO.		
.XX ±0.20 .X* ± 1°		USB - TC24H25-321		
XXX ±0.10 .XX* ±0.5°		APPD: ZYA		
UNITS mm		DRAWG NO. SETD0353		
MATERILA		CHED: TANG		
FINISH		DRAW: SHI		
		TITLE: USB C F 24PIN		
		SANWIN ELECTRONIC CO., LTD		
		SCALE SHEET REV.		
		1:1 2/2 A		

產品規格書				檔編號No. :	頁數Page
SPECIFICATION				SETD01285	P1/4
產品類別Type:	TYPE-C 母座连接器 TYPE-C FEMALE CONNECTOR			Prepared	Checked
產品系列Series:	USB-TC24H25	版本Version:	1	郭	冯
產品編號Part No.:	USB-TC24H25	日期Date:	2016/11/9	庆林	周
1. 通則 General Characteristics:					
1.1 應用範圍 Application range: 此產品規格書適用於TYPE-C 连接器USB-TC24H25。 This product specification is applied to the USB-TC24H25 TYPE-C Connector.					
1.2 使用環境條件 Acclimatization: 使用溫度範圍 Operating Temperature rang:-25℃ ~ +85℃ 保存溫度範圍 Preservative Temperature:-30 ~ 80℃					
1.3 測試條件Test Conditions: 若沒有特別說明，則試驗條件如下： Unless otherwise specified,the atmospheric for marking measurements and tests are as follows: 溫 度 Temperature:20±2℃ 相對濕度 Relative Humidity:45 ~ 85% 氣 壓 Air pressure:86 ~ 106Kpa 如對判定產生疑義，則試驗按以下條件進行： However,if the decision based on the measurements suspicion conditions, the following conditions shall be employed: 溫 度 Temperature:20±2℃ 相對濕度 Relative Humidity:65±5% 氣 壓 Air pressure:86 ~ 106Kpa					
2. 外觀和安裝尺寸 Appearance & Mounting Dimensions:					
2.1 外觀 Appearance: 產品外觀良好，無破損、銹蝕、裂紋和鍍層缺陷。 The switch shall have good finishing,and no rust,crack plating defects.					
2.2 安裝尺寸Mounting dimensions: 應符合產品設計要求，詳見成品圖。 Should comply with the design requirements of products, see the finished product drawing.					
3. 回路方式 Circuit Mode:					
4. 額定負荷及壽命 Rating and Ooerating life.					
額定負荷 Rated load:DC 9V,3A Max VBUS 機械壽命 Mechanical life:10,000次					
5. 操作力operating force : 插入力0.5~2.0Kgf ,扒出力0.8~2.0Kgf .					
6 電氣性能Electrical Characteristics					
專案Item	測試條件Test Conditions			標準Criteria	
6.1 接觸電阻 Contact Resistsnce	以1A 5VDC或者1KHz±200Hz(20mv max.50mA MAX)採用電壓降法測量。 Shall be measure at 1KHz±200Hz(20mv Max,50mA Max) or 1A 5V DC by voltage drop method.			常態Normal 40mΩ以下 40mΩ max 氣候及壽命試以後After climate and life test. 60mΩ 以下 60mΩ max	

產品規格書				檔編號No. :	頁數Page
SPECIFICATION				SETD01285	P2/4
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產品系列Series:	USB-TC24H25	版本Version:	1	郭	冯
產品編號Part No.:	USB-TC24H25	日期Date:	2016/11/9	庆林	周
6.2 絕緣阻抗 Insulation Resistance	在相互絕緣的所有端子之間及各接線端子與外露的非載流金屬零件之間加載100VDC,持續時間60±5S. 100V DC Voltage is applied between each pair of terminals and between the terminal and the metalframe for 60±5S.			常態Normal 100MΩ 氣候及壽命試以後After climate and life test. 10MΩ 以上 10MΩ min	
6.3 抗電強度 Dielectric strength	在相互絕緣的所有接線端子之間加載100V (50 ~ 60Hz 洩漏電流2mA)的交流電,各接線端子與外殼或非載流金屬零件之間加載100V(50 ~ 60Hz洩漏電流 2mA)交流電,持續時間60±5S. AC 100V(50-60Hz)2mA alternate current load is applied between open terminals connected with wires or 100V (50-60Hz), 2mA Alternate current loa for 60±5S.			無擊穿和飛弧現象 The switch without dielectric breakdown and fly arc phenomenon.	
7 機械性能 Mechanical Charateristics					
專案Item	測試條件 Test method			標準Criteria	
7.1 振動 Vibration Proof	连接器採用常規安裝方法牢固地安裝在實驗設備上,按下述參數進行實驗: 1) 振頻: 10-55Hz 2) 振幅: 1.5mm 3) 振動變化速率: 10 ~ 55 ~ 10Hz大約1分鐘 4) 變頻方法: 線形方式 5) 振動方向: 三個互相垂直的方向,其中一個方向為操作元件運動的方向。 Connector shall be secured to a testing machine by a normal mounting device and method,,Switch shell be measured after following test: 1)Vibration frequency range:10 ~ 55Hz 2) Total amplitude:1.5mm 3)Sweep ratio:10 ~ 55 ~ 10Hz,Approx 1 minute, 4)Method of changing the sweep vibration frequency linear, 5)Direction of vibration:Three perpendicular directions including actuating direction.			符合第6.1、6.2、6.3第7.1條要求。 According to item 6.1、6.2、6.3 and 7.1to examine	

產品規格書				檔編號No. :	頁數Page
SPECIFICATION				SETD01285	P3/4
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產品系列Series:	USB-TC24H25	版本Version:	1	郭	冯
產品編號Part No.:	USB-TC24H25	日期Date:	2016/11/9	庆林	周 乐 永安
8 耐候試驗 Weather Proof Characteristics					
專案Item	測試條件 Test method			標準Criteria	
8.1 高溫 Hot Proof	試件在 $80\pm 2^{\circ}\text{C}$ 的溫控箱內保持48小時，然後在正常溫度和濕度下恢復1小時，並在此後的1小時內對試件進行測量，水滴應消失。 After testing at $80\pm 2^{\circ}\text{C}$ for 48 hours,the switch shall be allowed to stand under normal temperature and humidity conditions for 1 hour and measurement shall be made with 1 hour after that, water drops shall be eliminated.				
8.2 恒定濕熱 Moisture Resistance	試件在 $60\pm 2^{\circ}\text{C}$,90~95%RH的溫控箱內保持48小時，然後在正常溫度和濕度下恢復1小時，並在此後的1小時內對試件進行測量。水滴應消失。 After testing at $60\pm 2^{\circ}\text{C}$,90~95%RH for 48 hours,the switch shall be allowed to stand under normal temperature and humidity conditions for 1 hour and measurement shall be made with 1 hour after that,Water drops shall be eliminated.				
8.3 低溫 Cold Proof	試件在 $-40\pm 2^{\circ}\text{C}$ 的溫控箱內保持48小時，然後在正常溫度和濕度下恢復1小時，並在此後的1小時內對試件進行測量，水滴應消失。 After testing at $-40\pm 2^{\circ}\text{C}$ for 48 hours,the switch shall be allowed to stand under normal temperature and humidity conditions for 1 hour and measurement shall be made with 1 hour after that, water drops shall be eliminated.			符合第6.1、6.2、6.3第7.1條要求。 According to item 6.1、6.2、6.3 and 7.1to examine	
8.4 溫度轉換 Temperature Cycling	試件按下述試驗條件試驗5個迴圈，然後在正常溫度和濕度下恢復1小時，並在此後的1小時內對試件進行測量，水滴應消失。 After 5 cycles of following conditions,the switch shall be allowed to stand under normal temperature and humidity conditions for 1 hourafter that,Water drops shall be eliminated. temperature $^{\circ}\text{C}$ time (MIN)				

產品規格書				檔編號No. :	頁數Page
SPECIFICATION				SETD01285	P4/4
產品類別Type:	TYPE-C 母座连接器 TYPE-C FEMALE CONNECTOR			Prepared	Checked
產品系列Series:	USB-TC24H25	版本Version:	1	郭	冯
產品編號Part No.:	USB-TC24H25	日期Date:	2016/11/9	庆林	周
9 耐久性試驗 Durability Characteristics					
專案Item	測試條件 Test method			標準Criteria	
9.1 壽命試驗 Operating Life	1)在不帶負荷的條件下，在壽命測試設備上連續轉換10,000次，頻率：10次/分鐘。 1)10,000 cycles of operation shall be performed continuously cycles without load at a rate of 10 cycles per minute.			操作力operating force： 插入力0.5~2.0Kgf，扒出力0.8~2.0Kgf。 其餘符合第6.1、6.2、6.3、7.1 條 Etceteras according to item 6.1. 6.2. 6.3, 7.1 to examine.	
10.焊接Soldering					
專案Item	測試條件 Test method			標準Criteria	
10.1 耐焊接熱 Solder Heat Resistance	試件在下述條件下進行試驗： 1) 焊接溫度:260±5℃； 2) 焊接時間：5±1S; 3) 熔錫面積：PCB板厚度的一半（PCB：t=1.6）。 Specimen shall be checked in the following conditions test: 1)Soldering temperature:260±5℃； 2)Soldering time:5±1S; 3)Soldering area：1/2 of PCB board thickness(PCB:t=1.6).			無機械和電氣損傷 The switch shall be free from mechanical and electrical damage.	
10.2 回流焊 Reflow Soldering				外觀無裂開、鬆動等異常現象，滿足於電氣性能。 Without deformation of frame or excessive looseness of terminals， Electrical performance shall be satisfied.	
10.3 可焊性 Solderbilitfy	焊接溫度：245±5℃ Solder temperature: 245 ±5℃. 浸漬時間：3 ±0.5S Dipping time: 3 ±0.5 second.			超過90%的浸漬覆蓋焊接。 More than 90% of the dipping covered by solder.	