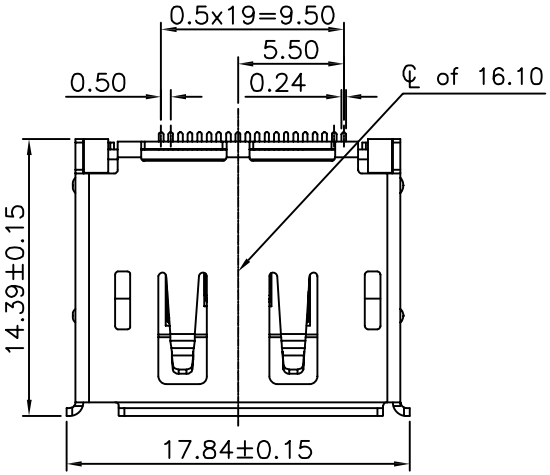
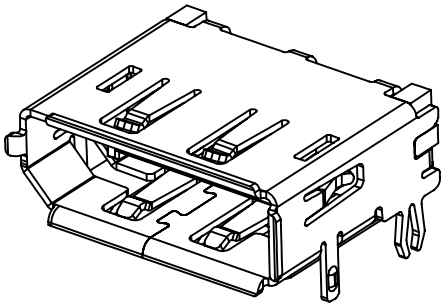
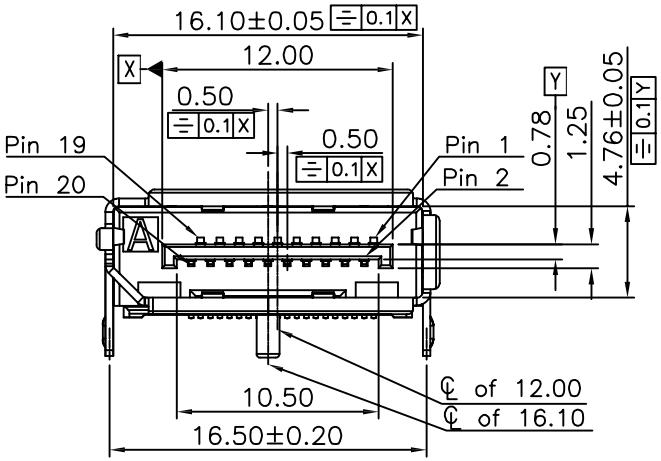
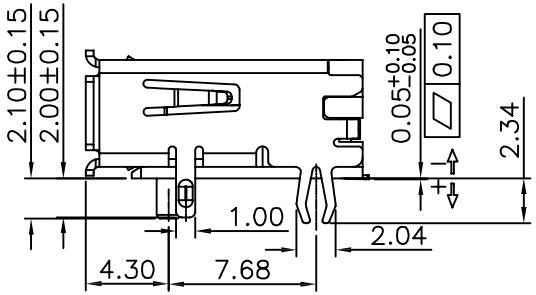
www.dzqbw.com Tel:0755-27575531 Fax:0755-27576267

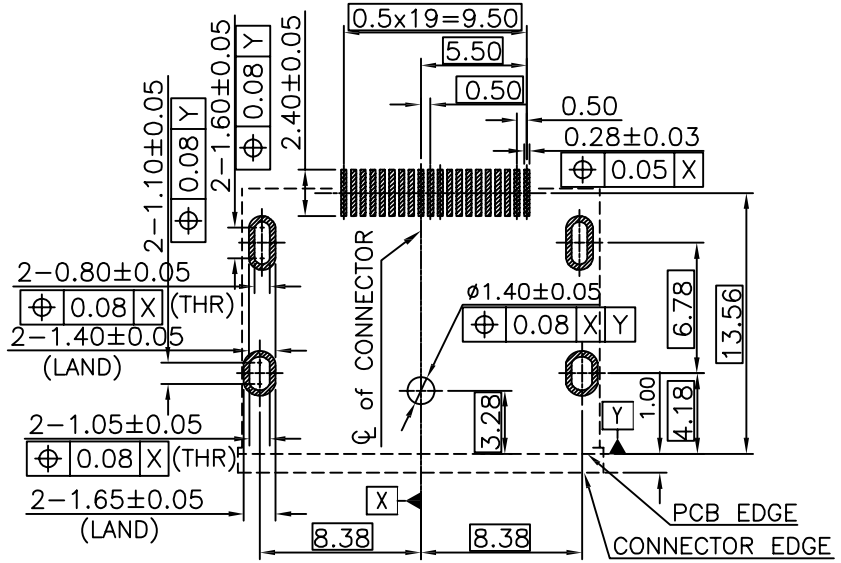




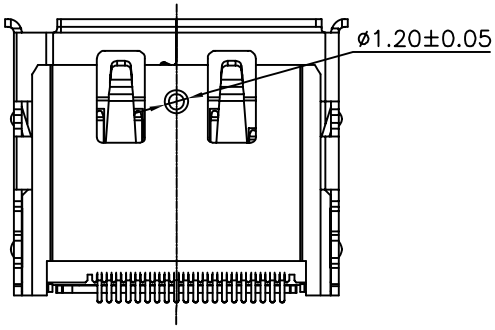
NOTE:
1.MATERIAL:
HOUSING:HIGH TEMPERATURE POLYESTER & GLASS FIBER UL94V-0 BLACK COLOR
CONTACT:COPPER ALLOY
SHELL:COPPER ALLOY
FINISH:
CONTACT: Au PLATING ON CONTACT AREA
SOLDERING AREA: TIN PLATING
SHELL: AU PLATING
ORD







RECOMMENDED P.C.BOARD LAYOUT (TOP VIEW)
TOLERANCES UNLESS OTHERWISE SPEC.±0.05
Hole AREA KEEP OUT AREA



深圳市华宇创精密电子有限公司

TOLERANCE: X.X ±0.30, X.XX ±0.25, X.XXX ±0.15, X.° ±2°, X.X° ±0.5°	DRAWED BY : 陈一鸣	DATE : 2014-02-23	PART NAME: DP SMT 有弹前卡点后鱼叉
	CHECKED BY: 马跃	DATE : 2014-02-23	PART NO. HYC01-DP20-476
			MOLD NO.
UNIT: mm [inch]	APPROVED BY: 邱国夷	DATE : 2014-02-23	DRAW NO: HYC-DP13110921
SCALE:1:1 SIZE: A4			SHEET NO. 1 OF 1

深圳市华宇创精密电子有限公司

DisplayPort Connector Product Test Specification			Rev.: A	Page: 1/4
Subject	DisplayPort Plug &Receptacle	Approved	Checked	Written
			Choice	Aimee

1. SCOPE

This specification covers performance,tests and quality requirements for DisplayPort Connector series products.

2. APPLICABLE DOCUMENTS AND SPECIFICATIONS

The following documents form a part of this specification to the extent specified. Herewith in the event of conflict between the requirements of the specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of the specification and the referenced documents, this specification shall take precedence.

3. REQULREMENTS

3.1. DESIGN AND CONSTRUCTION

Product shall be of the design, construction and physical dimensions specified on the applicable product drawing.

3.2. MATERIALS

A. Housing: Thermoplastic, UL94V-0

B. Contact: Copper Alloy,Gold plating on contact area,Tin Plating on soldertail over Nickel underplating overall.

C. Shield: Copper Alloy, Nickel underplating overall

3.3. RATINGS

A. Current Rating: 0.5A Max

B. Voltage Rating: 40VAC Max

C. Operting temperature:-20℃～+85℃

3.4. TEST CONDITION

The product is designedto meet the electrical, mechanical and environmental performance requirements specified in Figure 1

3.5. TEST REQUIREMNTS AND PROCEDURES SUMMARY

TEST DESCRIPTION	REQUIREMENT	PROCEDURE
Examination of product	Meets requirements of product drawing	Visual,dimensional and functional per applicable quality inspection plan
ELECTRICAL		
Contact Resistance	Contact:30mΩ Max Shell:50mΩ Max	EIA-364-23B Subject mated contacts assembled in housing to 20mV Max open circuit at 10mA Max

DisplayPort Connector Product Test Specification			Rev.: A	Page: 2/4
Subject	DisplayPort Plug &Receptacle	Approved	Checked	Written
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Insulation Resistance	Unmated:100MΩ Min Mated:10MΩ Min	ELA-364-21C 150VDC for 1minute Test between adjacent circuits of mated or unmated Connector
Dielectric Withstanding Voltage	No creeping discharge or flashover shall occur	ELA-364-20B Unmated connectors,apply 500VAC for 1minute between adjacent terminal or ground Mated connectors,apply 300VAC for 1 minute between adjacent terminal or ground
MECHANICAL		
Mating Force	44.1N (4.5Kgf) Max	ELA 364-13B Operation Speed: 25.4mm/min. Measure the force required to mate connector
Un-mating Force	9.8N（1.0Kgf）Min 39.2N（4.0Kgf）Max	ELA 364-13B Operation Speed: 25.4mm/min. Measure the force required to un-mate connector
Durability	See Note(a)	ELA-364-09C Opeation Speed:100cycles/hours Durability Cycles:10,000cycles Change form initial requirement: Contact:30 milliohm Max. Shell:50milliohm Max
Mechanical Shock	No discontinuities longer than 1 microsecond. See Note(a)	ELA-364-27B Accelerate Velocity:490m/s2(50G) Waveform: Half-sine shock plus Duration: 11 maec Number of Drops:3 drops each to normal and reversed direction of X,Y and Z axes,totally 18 drops.
Vibration	No discontinuities long than 1 microsecond. See Note(a)	ELA-364-28D Frequency:50Hz～2000Hz～50Hz in 20 minute Amplitude:1.52mm Duration:12 times in each of 3 mutually perpendicular planed
ENVIRONMENTAL		
Humidity	See Note(a)	ELA-364-31B Mated connectors to 4cycles between 25℃ with 80%RH and 85℃ with 95%RH

Thermal Shock	See Note(a)	ELA-364-32C Subject mated connectors to 10cycles between -55℃ and 85℃
Temperature Life	See Note(a)	ELA-364-17B Subject mated connectors to temperature life at 105℃ for 250 hours
Salt Spray	See Note(a)	ELA-364-26B Subject mated samples to 5% slat spray at 35℃ for 24 hours
Solderability	The surface shall have Minimum of 95% Solder coverage	Dip solder tails into the molten solder(held at 245 ±3C°)up to 1.2mm from the bottom of the housing for 3~5 seconds
Resistance to Soldering Heat	No Damage	Refer soldering method The conditions specified on paragraph7 Shall be repeated twice.
		Soldering iron method Soldering Time: 5 sec. Solder Temperature:370-400° C 0.5mm from terminal tip

Figure 1

NOTE (a):Shall meet visual requirements, show no physical damages and shall meet requirements of additional tests as specified in Test Sequence in Figure 2.

(b): Choose one Resistance to soldering Heat test method in accordance with the detail specimen type.

3.6.PRODUCT QUALIFICATION TEST SEQUENCE

Test or Examination	Test Group							
	A	B	C	D	E	F	G	H
	Test Sequence(a)							
Examination of Product	1,9	1,6	1,9	1,5	1,5	1,5	1	1
Contact Resistance	2,8	2,5	2,8	2,4	2,4	2,4		
Insulation Resistance			3,6					
Dielectric withstanding voltage			4,7					
Mating Force	3,6							
Un-mating Force	4 ,7							
Durability	5							
Vibration		3						
Physical shock		4						
Hunidity Temperature			5					
High Temperature Life				3				
Salt Speray					3			
Thermal Shock						3		
Solderability							2	
Resistance to Soldering Heat								2

Figure 2

NOTE: (a)Numbers indicate sequence in which tests are performed

(b)Discontinuities shall not take place in this test group,during tests.

***PLEASE PROVIDE MORE DETAIL FIGURES IF NECESSARY.**