

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [1050200003](#)  
**Status:** **Active**  
**Overview:** [displayport](#)  
**Description:** 0.50mm (.020") Pitch DisplayPort\* Male Receptacle, Right Angle, Through Hole, DIP Type, 0.38µm (15µ") Gold (Au) Plating, 20 Circuits, without Flange or Cover, Leadfree

**Documents:**

[3D Model](#) [Product Specification PS-47272-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

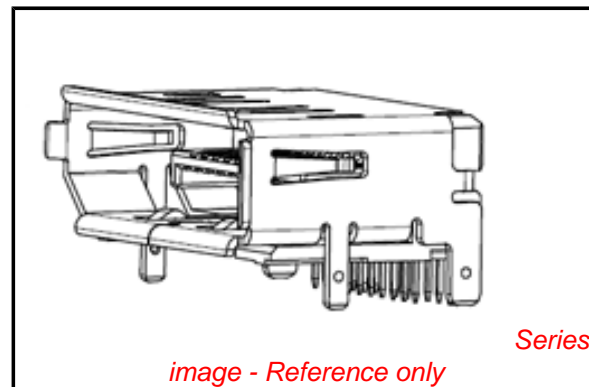
**General**

Product Family	I/O Connectors
Series	<a href="#">105020</a>
Application	Wire-to-Board
Comments	Without Flange. Without Cover
Component Type	Receptacle
Overview	<a href="#">displayport</a>
Product Name	DisplayPort*
Type	N/A

**Physical**

Boot Color	N/A
Circuits (Loaded)	20
Circuits (maximum)	20
Color - Resin	Black
Gender	Male
Keying to Mating Part	Yes
Lock to Mating Part	Yes
Material - Metal	Copper Alloy
Material - Plating Mating	Gold
Material - Plating Termination	Tin-Bismuth
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Right Angle
PCB Locator	No
PCB Retention	Yes
PCB Thickness Recommended (in)	0.063 In
PCB Thickness Recommended (mm)	1.60 mm
Packaging Type	Embossed Tape on Reel
Panel Mount	Without Flange
Pitch - Mating Interface (in)	0.039 In
Pitch - Mating Interface (mm)	0.50 mm
Pitch - Term. Interface (in)	0.039 In
Pitch - Term. Interface (mm)	0.50 mm
Plating min: Mating (µin)	15
Plating min: Mating (µm)	0.38
Plating min: Termination (µin)	40
Plating min: Termination (µm)	1
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Ports	1
Temperature Range - Operating	-20°C to +85°C
Termination Interface: Style	Through Hole
Waterproof / Dustproof	No

**Electrical**



**EU RoHS**

**ELV and RoHS  
Compliant**  
**REACH SVHC**  
 Not Reviewed  
**Halogen-Free  
Status**  
**Not Reviewed**

**China RoHS**



**Need more information on product  
environmental compliance?**

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**  
[105020Series](#)

Current - Maximum per Contact	0.5A
Grounding to Panel	Yes
Shielded	Yes
Voltage - Maximum	40V AC

### **Material Info**

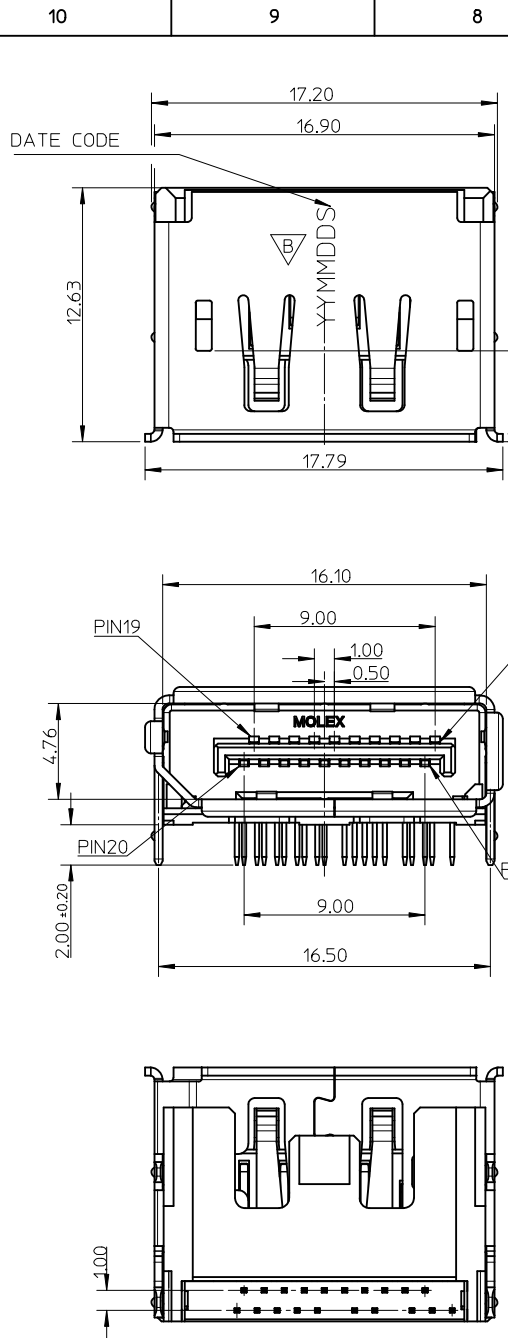
### **Reference - Drawing Numbers**

Packaging Specification	PK-105020-001
Product Specification	PS-47272-001
Sales Drawing	SD-105020-001

\* DisplayPort is a Trademark of VESA

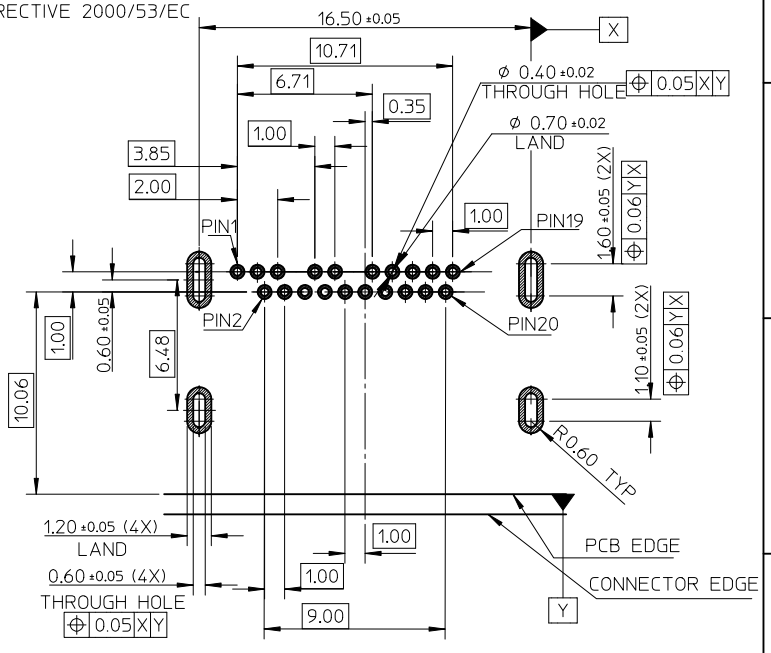
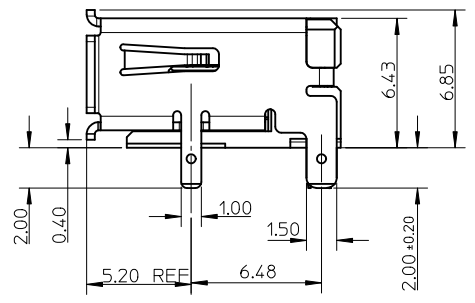
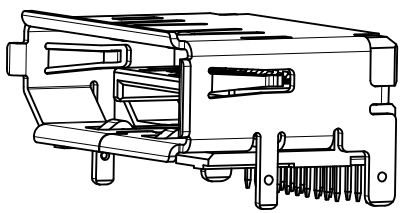
This document was generated on 05/31/2010

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NOTES:

1. MATERIAL,  
HOUSING:HIGH TEMPERATURE THERMAL PLASTIC BLACK 30% GLASS FILLED,UL94V-0.  
GUIDE:HIGH TEMPERATURE THERMAL PLASTIC BLACK 30% GLASS FILLED,UL94V-0.  
TERMINAL: COPPER ALLOY  
SHELL: COPPER ALLOY
- 2.PLATING:  
TERMINAL:CONTACT AREA (1)0.76MICROMETER GOLD PLATING  
(2)0.38MICROMETER GOLD PLATING  
(3) GOLD FLASH PLATING  
AND SOLDER TAIL(a) 1-3MICROMETER TIN BISMUTH PLATING  
(b)GOLD FLASH PLATING  
UNDER PLATING 1-3 MICROMETER NICKEL PLATING OVERALL  
SHELL:1.27~2.54 MICROMETER SOLDERABLE NICKEL PLATING OVERALL
3. PRODUCT COMPLANT TO ROHS DIERTIVE 2002/95/EC AND ELV DIRECTIVE 2000/53/EC



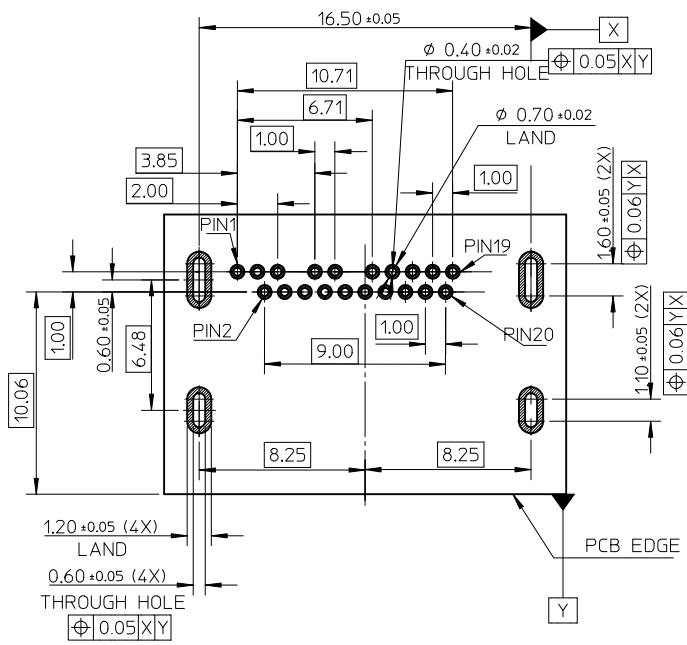
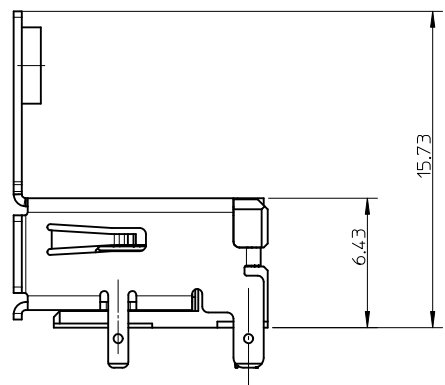
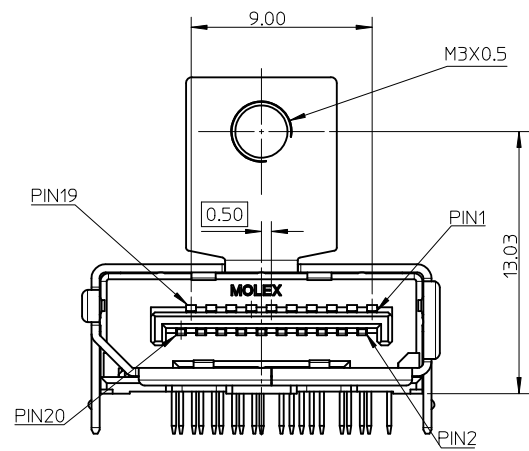
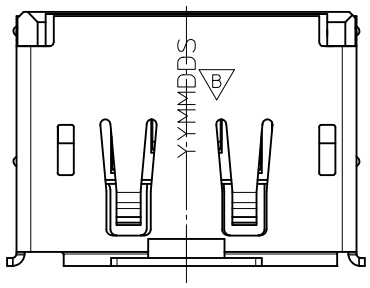
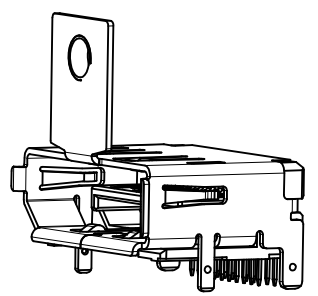
RECOMMENDER PCB LAYOUT (THICKNESS=1.6 ± 0.15)

BOTTOM VIEW

REVISED EC NO: SH2010-0424 DRWN:HHE CHKD:FYANG05 APPR:RZHANG	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION			
		▽=0 C=0	mm	INCH	MM ONLY	2:1	METRIC				
			4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.2 ± ---	1 PLACE ± 0.2 ± ---	DRAWN BY HHE	DATE 2007-05-21	TITLE 1.0MM PITCH DIP TYPE DISPLAY PORT HEADER -LEAD FREE-		
			ANGULAR ± 1 °		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		CHECKED BY HWWANG	DATE 2007-05-21	MOLEX INCORPORATED		
				MATERIAL NO. SEE SHEET 3		DOCUMENT NO. SD-105020-001		SHEET NO. 1 OF 4			
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											

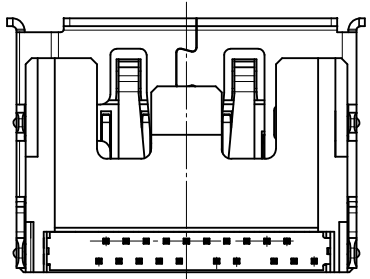
# WITH FLANGE

NOTES:  
UNSPECIFIED DIMENSION ARE SAME AS SHEET1



RECOMMENDER PCB LAYOUT (THICKNESS=1.6±0.15)

BOTTOM VIEW

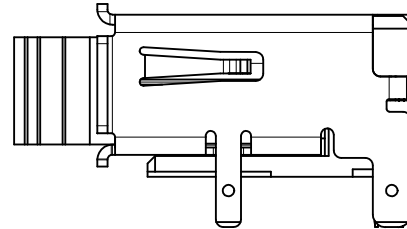
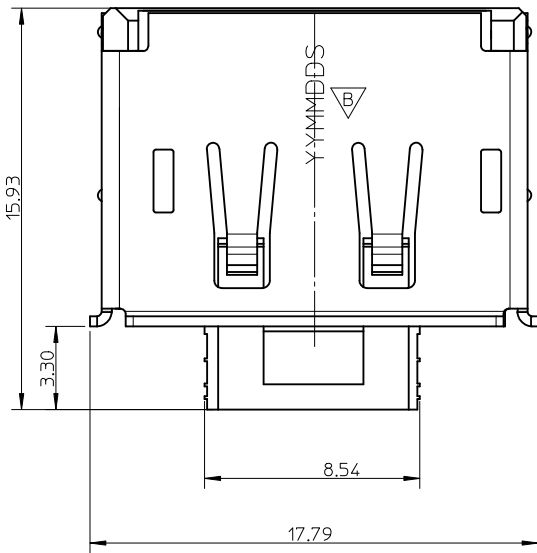
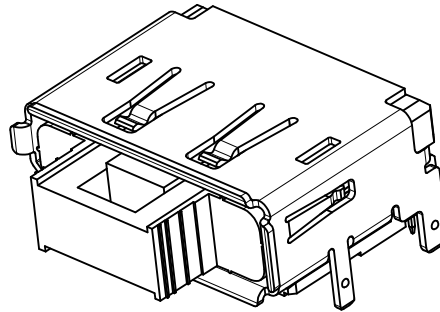
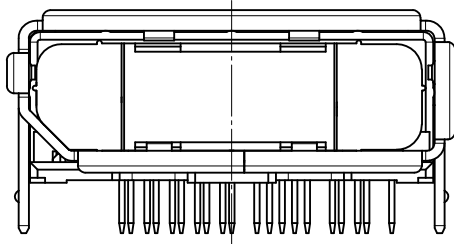


REVISED EC NO: SH2010-0424 DRWN:HHE 2010/05/12 CHKD:FYANG05 2010/05/17 APPR:RZHANG 2010/06/14 D	DESCRIPTION REV	QUALITY SYMBOLS ▽=0 ⊕=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± 0.2 ± --- ANGULAR ± 1 °	mm INCH DRAWN BY HHE DATE 2007-05-21 CHECKED BY HWANG DATE 2007-05-21 APPROVED BY JNCHEN DATE 2007-05-21 MATERIAL NO.	TITLE 1.0MM PITCH DIP TYPE DISPLAY PORT HEADER -LEAD FREE-		MOLEX INCORPORATED		DOCUMENT NO.	SHEET NO.	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 3		SD-105020-001		2 OF 4		
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								

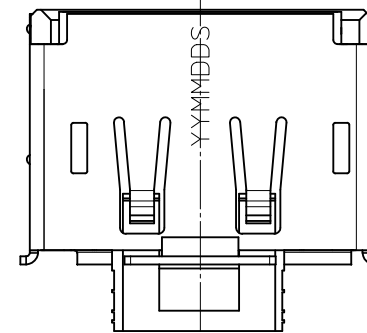
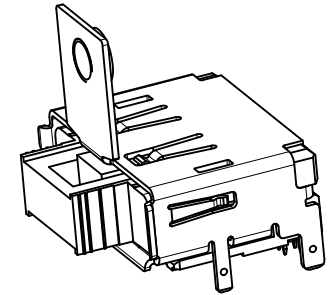
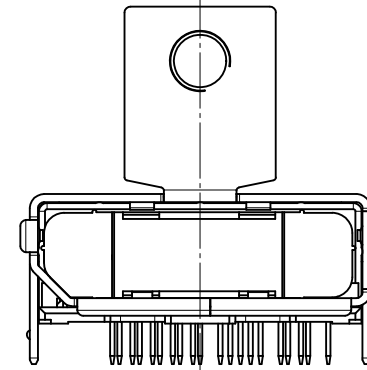
10	9	8	7	6	5	4	3	2	1
ASSEMBLY NO.	FLANGE	PLATING IN THE CONTACT AREA	PLATING IN THE SOLDER TAIL AREA	WITH COVER	REMARK				
105020-0001	WITHOUT	SEE NOTE2(1)	SEE NOTE2(a)	WITHOUT	FOR SHEET 1				
105020-0003		SEE NOTE2(2)							
105020-0004		SEE NOTE2(3)							
105020-0013		SEE NOTE2(1)							
105020-0002	WITH	SEE NOTE2(1)	SEE NOTE2(a)	WITHOUT	FOR SHEET 2				
105020-0005		SEE NOTE2(2)							
105020-0016		SEE NOTE2(3)							
105020-0007	WITHOUT	SEE NOTE2(1)	SEE NOTE2(a)	WITH	FOR SHEET 4				
105020-0008	WITH	SEE NOTE2(1)							
105020-0009	WITHOUT	SEE NOTE2(2)							
105020-0010		SEE NOTE2(3)							
105020-0011	WITH	SEE NOTE2(2)							
105020-0012		SEE NOTE2(3)							

<b>REVISED</b> EC NO: SH2010-0424 DRWN:HHE 2010/05/12 CHKD:FYANG05 2010/05/17 APPR:RZHANG 2010/06/14 D	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	=0 =0	mm      INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± 0.2 ± --- ANGULAR ± 1 °	MM ONLY	2:1	METRIC	
	DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY	DATE	TITLE	
			HHE	2007-05-21	1.0MM PITCH DIP TYPE DISPLAY PORT HEADER -LEAD FREE-	
			CHEN	2007-05-21	MOLEX INCORPORATED	
				MATERIAL NO.	DOCUMENT NO.	SHEET NO.
				SEE CHART	SD-105020-001	3 OF 4
			SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
			A3			

WITH COVER



WITH FLANGE AND COVER



NOTES:

- 1.UNSPECIFIED DIMENSION ARE SAME AS SHEET1
- 2.CONNECTOR WITH COVER IS RECOMMENDED FOR WAVING SOLDERING PEG
- 3.PCB DIMENSION REFER TO SHEET1

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		$\nabla = 0$ $\triangle = 0$		mm	INCH	MM ONLY		2:1	METRIC		
		4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE				
		3 PLACES	± ---	± ---	HHE	2007-05-21	1.0MM PITCH DIP TYPE DISPLAY PORT HEADER -LEAD FREE-				
2 PLACES	± 0.2	± ---	CHECKED BY	DATE	MOLEX INCORPORATED						
1 PLACE	± 0.2	± ---	HWWANG	2007-05-21							
ANGULAR ± 1 °			APPROVED BY	DATE	MATERIAL NO.		DOCUMENT NO.				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			JNCHEN	2007-05-21	SEE SHEET 3		SD-105020-001		SHEET NO. 4 OF 4		
			SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							
			A3								