

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

**Part Number:** **0670688000**  
**Status:** **Active**  
**Description:** Universal Serial Bus (USB) Shielded I/O Type B Receptacle, Right Angle, with Kinked Solder Tabs, Color Black, Gold (Au) Flash Plating, Tray Pack, Lead Free

**Documents:**

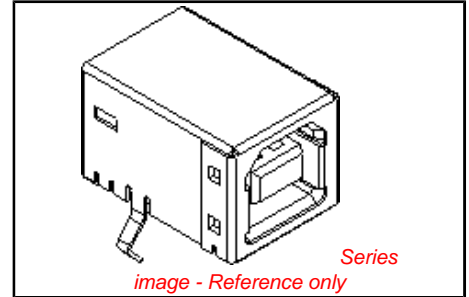
[3D Model](#) [Product Specification PS-67998-0000 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	I/O Connectors
Series	67068
Application	Wire-to-Board
Comments	Single
Component Type	Receptacle
MolexKits	Yes
Product Name	USB
Type	B

**Physical**

Boot Color	N/A
Circuits (Loaded)	4
Circuits (maximum)	4
Color - Resin	Black
Gender	Receptacle
Lock to Mating Part	Yes
Material - Plating Mating	Gold
Material - Plating Termination	Tin-Lead
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Right Angle
PC Tail Length (in)	0.110 In
PC Tail Length (mm)	2.80 mm
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.063 In
PCB Thickness Recommended (mm)	1.60 mm
Packaging Type	Tray
Panel Mount	No
Pitch - Mating Interface (in)	0.098 In
Pitch - Mating Interface (mm)	2.50 mm
Pitch - Term. Interface (in)	0.098 In
Pitch - Term. Interface (mm)	2.50 mm
Plating min: Mating (µin)	2
Plating min: Mating (µm)	0.05
Plating min: Termination (µin)	75
Plating min: Termination (µm)	1.875
Polarized to Mating Part	Yes
Polarized to PCB	Yes
Ports	1
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	0°C to +50°C
Termination Interface: Style	Through Hole
Waterproof / Dustproof	No
Wire Size AWG	N/A



**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**  
 67068Series

**Mates With**  
 USB Type B Plug

**Electrical**

Current - Maximum per Contact	1.5A
Shield Type	Full Shield
Shielded	Yes
Voltage - Maximum	30V (RMS)

**Solder Process Data**

Lead-free Process Capability	Wave Capable (TH only)
Process Temperature max. C	260

**Material Info****Reference - Drawing Numbers**

Product Specification	PS-67998-0000
Sales Drawing	SD-67068-003, SD-67068-004

This document was generated on 06/07/2010

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10 9 8 7 6 5 4 3 2 1

NOTES :

1. MATERIAL :

HOUSING : (a) HIGH TEMP. NYLON ,GLASS FIBER FILLED,UL94V-0, COLOR: BLACK,  
(b) POLYESTER , GLASS FIBER FILLED,UL94V-0, COLOR: WHITE,

TERMINAL : PHOSPHOR BRONZE  
METAL SHELL : COPPER ALLOY

2. PLATING :

TERMINAL :

CONTACT AREA : (a) GOLD FLASH,

(b) GLOD (Au), THICKNESS = 30 MICROINCH MINIMUM,  
/0.76 MICROMETER MINIMUM.

SOLDER TAIL :

PURE TIN(Sn) THICKNESS= 75 MICROINCH MINIMUM .  
/1.9 MICROMETER MINIMUM.

UNDER PLATE : NICKEL (Ni), THICKNESS= 50 MICROINCH MINIMUM.

/1.27 MICROMETER MINIMUM.

METAL SHELL :

PURE TIN(Sn) , THICKNESS= 50 MICROINCH MINIMUM.  
/1.27 MICROMETER MINIMUM.

UNDER PLATE : NICKEL (Ni) , THICKNESS= 50 MICROINCH MINIMUM.

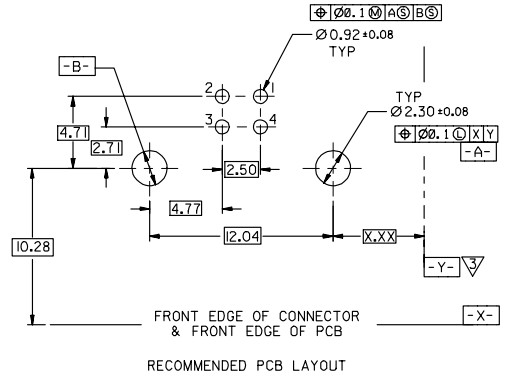
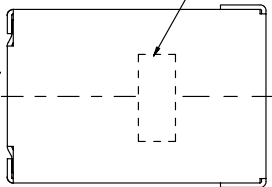
/1.27 MICROMETER MINIMUM.

▽ DATUM AND BASIC DIMENSIONS ESTABLISHED BY CUSTOMER

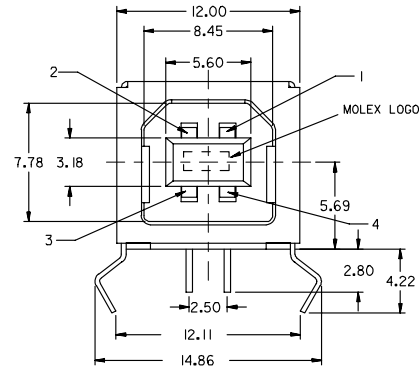
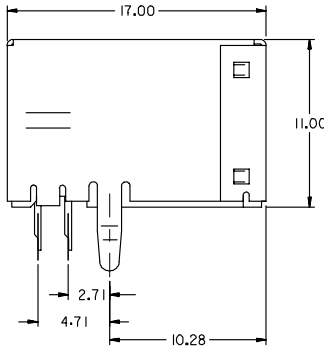
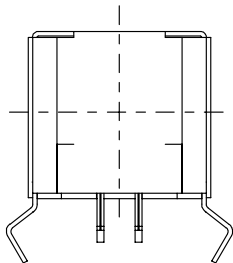
RECOMMENDED PCB THICKNESS : 1.60±0.05

4 PRODUCT SPECIFICATION : REFER TO PS-67998-0000

MOLEX ID OF MFG PLANT CODE



FRONT EDGE OF CONNECTOR  
& FRONT EDGE OF PCB  
RECOMMENDED PCB LAYOUT



PART NUMBER LEGEND:

67068- \* \* 0 \*

8 : BLACK HOUSING  
9 : WHITE HOUSING

0 : TRAY PACKAGING  
1 : TUBE PACKAGING

0 : GOLD FLASH  
1 : 0.76 MICROMETER/30  
MICROINCH GOLD  
KINK TYPE BOARD LOCK

NEW RELEASE EC NO. SH2005-0142 DRAWN: DAVID HU 2004/11/05 CHKD: HARVEY 2004/11/05 APPR: YITAP 2004/11/25	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.25 ± ---	1 PLACE ± 0.25 ± ---	ANGULAR ± 3 °	DRAWN BY DAVID HU	DATE 2004/11/05
A	DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE NOTES		MATERIAL NO. DOCUMENT NO. SD-67068-003		SHEET NO. 1 OF 4
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

9 8 7 6 5 4 3 2 1

NOTES :

1. MATERIAL :

HOUSING : (a) HIGH TEMP. NYLON, CLASS FIBER FILLED, UL94V-0, COLOR: BLACK,  
(b) POLYESTER, CLASS FIBER FILLED, UL94V-0, COLOR: WHITE,

TERMINAL : PHOSPHOR BRONZE  
METAL SHELL : COPPER ALLOY

2. PLATING :

TERMINAL :

CONTACT AREA : (a) GOLD FLASH,

(b) GLOD (Au), THICKNESS = 30 MICROINCH MINIMUM,  
/0.76 MICROMETER MINIMUM.

SOLDER TAIL :

PURE TIN(Sn) THICKNESS= 75 MICROINCH MINIMUM .  
/1.9 MICROMETER MINIMUM.

UNDER PLATE : NICKEL (Ni), THICKNESS= 50 MICROINCH MINIMUM.

/1.27 MICROMETER MINIMUM.

METAL SHELL : PURE TIN(Sn) THICKNESS= 50 MICROINCH MINIMUM.

/1.27 MICROMETER MINIMUM.

UNDER PLATE : NICKEL (Ni), THICKNESS= 50 MICROINCH MINIMUM.

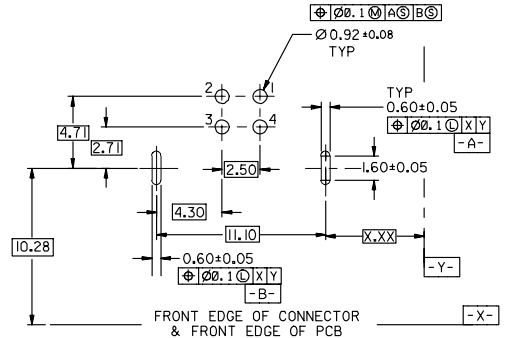
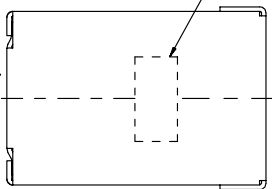
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3 DATUM AND BASIC DIMENSIONS ESTABLISHED BY CUSTOMER

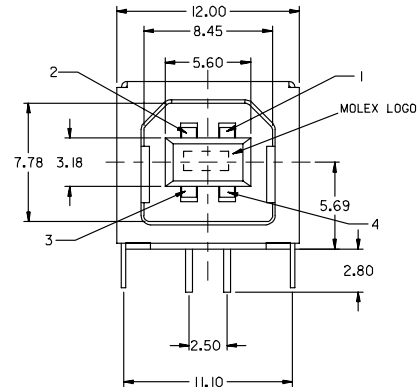
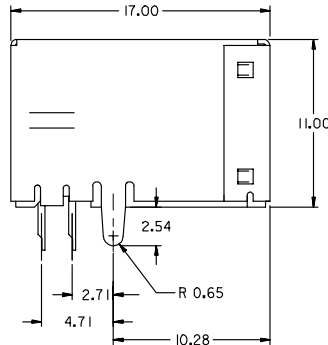
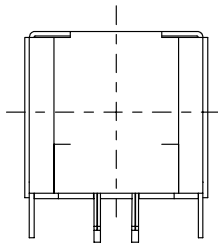
RECOMMENDED PCB THICKNESS : 1.60±0.05

4 PRODUCT SPECIFICATION : REFER TO PS-67998-0000

MOLEX ID OF MFG PLANT CODE



RECOMMENDED PCB LAYOUT



PART NUMBER LEGEND:

67068-

8 : BLACK HOUSING  
9 : WHITE HOUSING

0 : GOLD FLASH  
1 : 0.76 MICROMETER/30  
MICROINCH GOLD

0 : TRAY PACKAGING  
1 : TUBE PACKAGING

STRAIGHT TAB

NEW RELEASE IEC NO. SH2005-0142 DRWN: DAVID HU 2004/11/05 CHKD: HARRY 2004/11/05 APPR: YITAP 2004/11/25	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
			mm	INCH	DRAWN BY DAVID HU	DATE 2004/11/05	TITLE USB B TYPE CONNECTOR WITH STRAIGHT TAB (LEAD-FREE)		
		4 PLACES	± ---	± ---	CHECKED BY	DATE 2004/11/05	MATERIAL NO. SEE NOTES		
		3 PLACES	± ---	± ---	APPROVED BY	DATE 2004/11/05	DOCUMENT NO. SD-67068-003		
	2 PLACES	± 0.25	± ---	ANGULAR ± 3 °		SHEET NO. 2			
	1 PLACE	± 0.25	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					
		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

8 7 6 5 4 3 2 1

NOTES :  
1. MATERIAL :  
HOUSING : (a) HIGH TEMP. NYLON, GLASS FIBER FILLED, UL94V-0, COLOR: BLACK,

TERMINAL : PHOSPHOR BRONZE  
METAL SHELL : COPPER ALLOY

2. PLATING :

TERMINAL :  
CONTACT AREA : (a) GOLD FLASH,  
(b) GLOD (Au), THICKNESS = 30 MICROINCH MINIMUM,  
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SOLDER TAIL :  
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UNDER PLATE : NICKEL (Ni), THICKNESS= 50 MICROINCH MINIMUM,  
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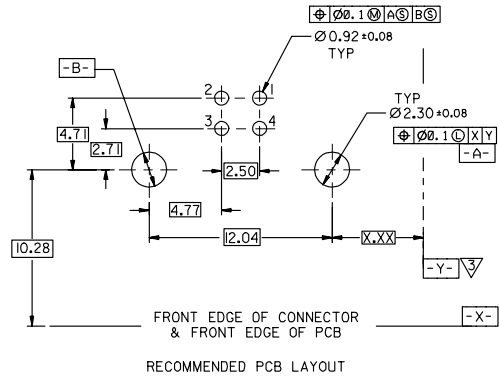
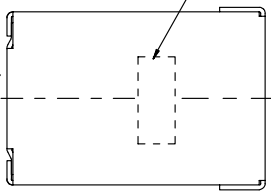
METAL SHELL :  
PURE TIN(Sn), THICKNESS= 50 MICROINCH MINIMUM,  
/1.27 MICROMETER MINIMUM.

UNDER PLATE : NICKEL (Ni), THICKNESS= 50 MICROINCH MINIMUM,  
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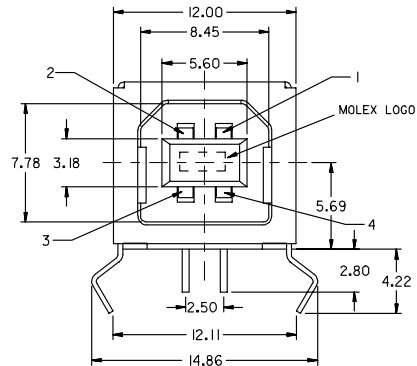
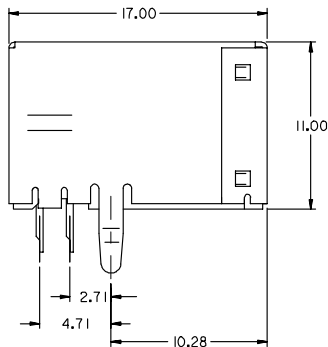
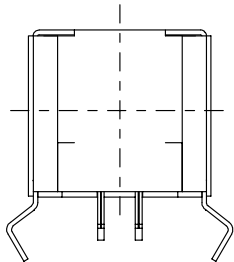
DATUM AND BASIC DIMENSIONS ESTABLISHED BY CUSTOMER  
RECOMMENDED PCB THICKNESS : 1.60±0.05

4 PRODUCT SPECIFICATION : REFER TO PS-67998-0000

MOLEX ID OF MFG PLANT CODE



FRONT EDGE OF CONNECTOR & FRONT EDGE OF PCB  
RECOMMENDED PCB LAYOUT



PART NUMBER LEGEND:

67068- 7041

				MATERIAL : SEE NOTES		MOLEX TAIWAN LTD. SHEET 3 OF 4	
				FINISH : SEE NOTES		GENERAL TOLERANCES ANGLE : # 3° DIM : # .25/.010	
				WIRE RANGE :		ENG. NO.: SD-67068-003	
				INS. RANGE :		REV A	
A NEW RELEASE FOR LEAD-FREE		DAVID HU 2004/11/5		DRAWN BY 2004/11/5 DAVID HU		TITLE : HIGH TEMP USB B TYPE CONNECTOR KINK TYPE BOARD LOCK (LEAD-FREE)	
LTR		REVISION RECORD		ECN		DR	
REVISE ONLY ON CAD SYSTEM				APPR'D BY		SCALE 4 : 1	

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MXT, Sg - 13

ENG. NO

EDP NO.

SIMILAR ITEM

CAD FILE :

DO NOT SCALE DRAWING

F

E

D

C

B

A

ENG. NO SDA-67068-0000

EDP NO.

SIMILAR ITEM

CAD FILE : \_S6706802\_

DO NOT SCALE DRAWING

8 7 6 5 4 3 2 1

NOTES :

1. MATERIAL :

HOUSING : (a) HIGH TEMP. NYLON, GLASS FIBER FILLED, UL94V-0, COLOR: BLACK,

TERMINAL : PHOSPHOR BRONZE  
METAL SHELL : COPPER ALLOY

2. PLATING :

TERMINAL :  
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METAL SHELL :  
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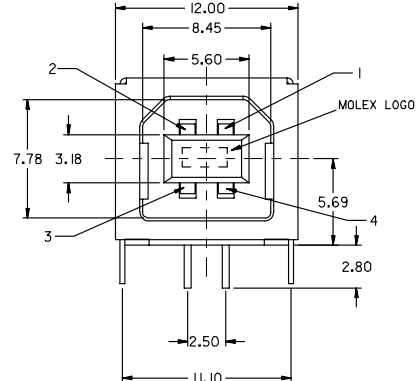
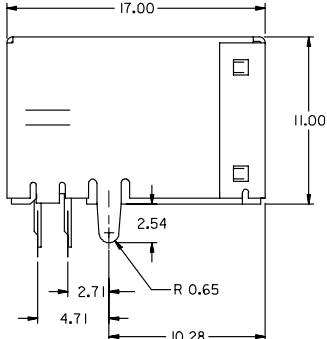
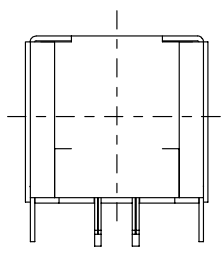
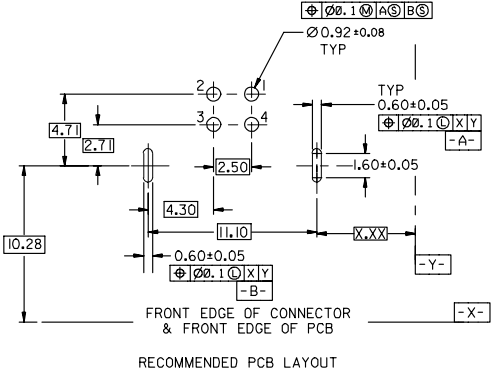
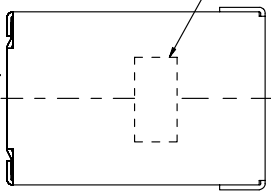
UNDER PLATE : NICKEL (Ni), THICKNESS= 50 MICROINCH MINIMUM,  
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3 DATUM AND BASIC DIMENSIONS ESTABLISHED BY CUSTOMER

RECOMMENDED PCB THICKNESS : 1.60±0.05

4 PRODUCT SPECIFICATION : REFER TO PS-67998-0000

MOLEX ID OF MFG PLANT CODE



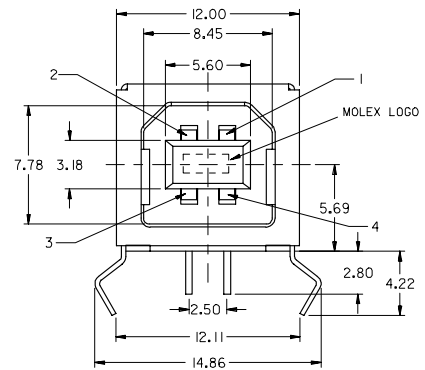
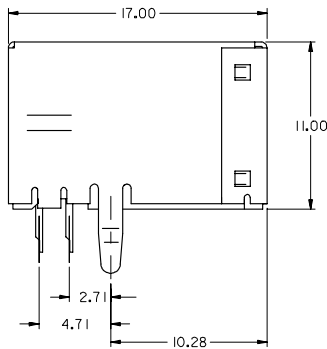
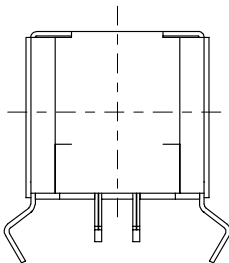
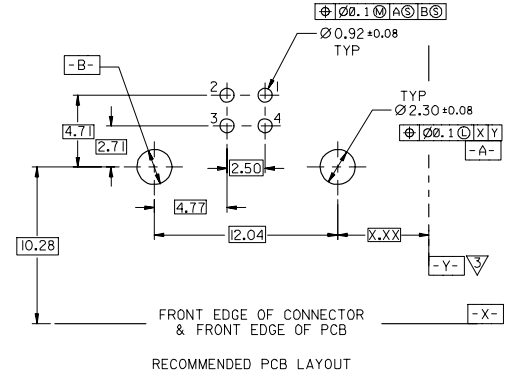
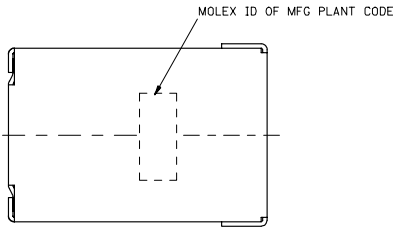
PART NUMBER LEGEND:

67068- 7051

				MATERIAL : SEE NOTES		MOLEX TAIWAN LTD.	
				FINISH : SEE NOTES		SHEET 4 OF 4	
				WIRE RANGE :		GENERAL TOLERANCES	
				INS. RANGE :		ANGLE : ± 3° DIM : ± .25/.010	
A NEW RELEASE FOR LEAD-FREE				DAVID HJ 2006/11/5		ENG. NO.: SD-67068-003	
LTR REVISION RECORD ECN DR DATE				DRAWN BY 2004/11/5 DAVID HJ		REV A	
REVISE ONLY ON CAD SYSTEM				APPR'D BY		TITLE : HIGH TEMP/5B B TYPE CONNECTOR WITH STRAIGHT TAB (LEAD-FREE)	
				SCALE 4 : 1			

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX (FEMLE) AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION MXT, Sg - 13

NOTES:  
 1.MATERIAL:  
 HOUSING:  
 (a)HIGH TEMP,NYLON,GLASS FIBRE FILLED,UL94V-0,COLOR: 8#BLACK  
 (b)POLYESTER(PBT),30% GLASS FIBER FILLED,UL94V-0,COLOR: 9#WHITE  
 TERMINAL: PHOSPHOR BRONZE  
 METAL SHELL: COPPER ALLOY  
 2.PLATING:  
 TERMINAL:  
 (c)GOLD FLASH ON CONTACT AREA,75 MICRONCH MINIMUM PURE TIN(Sn)  
 ON SOLDER TAIL,UNDER 50 MICRONCH MINIMUM NICKEL(Ni) PLATE.  
 (d)30 MICRONCH MINIMUM GOLD(Au) ON CONTACT AREA,75 MICRONCH  
 MINIMUM PURE TIN(Sn) ON SOLDER TAIL,UNDER 50 MICRONCH  
 MINIMUM NICKEL(Ni) PLATE.  
 (e)GOLD FLASH ON CONTACT AREA,75 MICRONCH MINIMUM MATTE TIN(Sn)  
 ON SOLDER TAIL,UNDER 50 MICRONCH MINIMUM NICKEL(Ni) PLATE.  
 (f)30 MICRONCH MINIMUM GOLD(Au) ON CONTACT AREA,75 MICRONCH  
 MINIMUM MATTE TIN(Sn) ON SOLDER TAIL,UNDER 50 MICRONCH  
 MINIMUM NICKEL(Ni) PLATE.  
 METAL SHELL:  
 (g)50 MICRONCH MINIMUM PURE TIN(Sn),UNDER 50 MICRONCH MINIMUM  
 NICKEL(Ni) PLATE.  
 (h)50 MICRONCH MINIMUM MATTE TIN(Sn),UNDER 50 MICRONCH MINIMUM  
 NICKEL(Ni) PLATE.  
 3.DATUM AND BASIC DIMENSIONS ESTABLISHED BY CUSTOMER.  
 RECOMMENDED PCB THICKNESS : 1.60±0.05  
 4.PRODUCT SPECIFICATION : REFER TO PS-67998-0000



P/N	HOUSING COLOR	PLATING
67068-8000	BLACK	GOLD FLASH SEE NOTES[2-(c),2-(g)]
67068-8001	BLACK	30MICRONCH Au SEE NOTES[2-(d),2-(g)]
67068-9000	WHITE	GOLD FLASH SEE NOTES[2-(c),2-(g)]
67068-9001	WHITE	30MICRONCH Au SEE NOTES[2-(d),2-(g)]
67068-8012	BLACK	30MICRONCH Au SEE NOTES[2-(f),2-(h)]
67068-8013	BLACK	GOLD FLASH SEE NOTES[2-(e),2-(h)]

REVISED EC NO. SH2007-0468 2007/01/19 DRW:HYH01 CHKC:WANG 2007/01/19 APPR: JIN-CHEN 2007/01/26 DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION															
	$\nabla=0$ $\nabla=0$	<table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± .010</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.25</td> <td>± .010</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.25	± .010	1 PLACE	± 0.25	± .010	MM ONLY	4:1	METRIC	
		mm	INCH																		
	4 PLACES	± ---	± ---																		
3 PLACES	± ---	± ---																			
2 PLACES	± 0.25	± .010																			
1 PLACE	± 0.25	± .010																			
	ANGULAR ± 3°																				
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE NOTES																			

TITLE: USB B TYPE CONNECTOR LEAD-FREE  
 MOLEX INCORPORATED  
 MATERIAL NO. SEE NOTES  
 DOCUMENT NO. SD-67068-004  
 SHEET NO. 1 OF 1  
 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION