

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0894011610](#)
Status: **Active**
Description: 2.00mm (.079") Pitch Wire-to-Board Header, Right Angle, 16 Circuits

Documents:

[3D Model](#) [Product Specification PS-87369-0002 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
 UL E29179

General

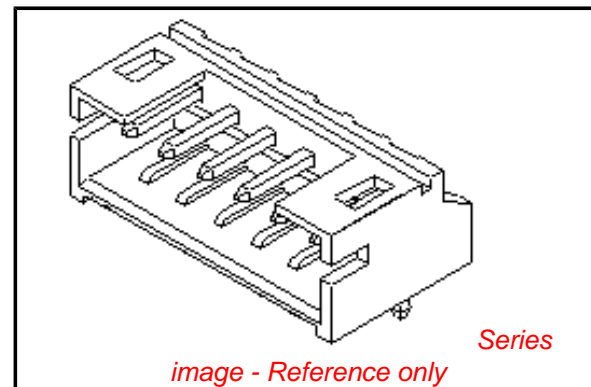
Product Family PCB Headers
 Series [89401](#)
 Application Wire-to-Board
 Product Name N/A

Physical

Breakaway No
 Circuits (Loaded) 16
 Circuits (maximum) 16
 Color - Resin Natural
 Durability (mating cycles max) 30
 First Mate / Last Break No
 Flammability 94V-0
 Glow-Wire Compliant No
 Guide to Mating Part No
 Keying to Mating Part None
 Lock to Mating Part Yes
 Material - Plating Mating Tin
 Material - Plating Termination Tin
 Material - Resin Nylon
 Number of Rows 1
 Orientation Right Angle
 PC Tail Length (in) 0.118 In
 PC Tail Length (mm) 3.00 mm
 PCB Locator No
 PCB Retention Yes
 PCB Thickness Recommended (in) 0.045 In
 PCB Thickness Recommended (mm) 1.20 mm
 Packaging Type Bag
 Pitch - Mating Interface (in) 0.079 In
 Pitch - Mating Interface (mm) 2.00 mm
 Plating min: Mating (µin) 50
 Plating min: Mating (µm) 1.27
 Plating min: Termination (µin) 50
 Plating min: Termination (µm) 1.27
 Polarized to PCB No
 Shrouded Partial
 Stackable No
 Temperature Range - Operating -25°C to +85°C
 Termination Interface: Style Through Hole

Electrical

Current - Maximum per Contact 4A



EU RoHS

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

China RoHS



Not Reviewed

Need more information on product environmental compliance?

Email 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

[89401Series](#)

Mates With

[90147 C-Grid® PC Board Connector](#). [90123 C-Grid III™ Modular Crimp Housing](#)

Voltage - Maximum

250V

Material Info

Reference - Drawing Numbers

Product Specification
Sales Drawing

PS-87369-0002, RPS-87369-001
SD-89401-***1*

This document was generated on 06/08/2010

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NOTES :

1. MATERIAL :
 HOUSING : HIGH TEMPERATURE NYLON , GLASS FIBRE FILLED, UL94-V0 , COLOR: BLACK
 TERMINAL : PHOSPHOR BRONZE
 METAL SHELL : DEEP DRAWN STEEL

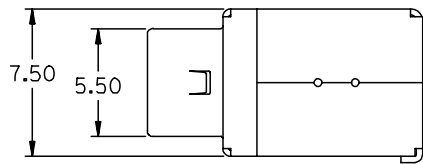
2. PLATING :
 TERMINAL :
 CONTACT AREA : (a) GOLD FLASH,
 (b) GOLD (Au), THICKNESS = 30 MICROINCH MINIMUM.
 SOLDER TAIL :
 PURE TIN THICKNESS= 75 MICROINCH MINIMUM .
 UNDER PLATE : NICKEL (Ni), THICKNESS= 50 MICROINCH MINIMUM.
 METAL SHELL :
 TIN (Sn) ALLOY , THICKNESS= 100 MICROINCH MINIMUM.
 UNDER PLATE : NICKEL (Ni), THICKNESS= 50 MICROINCH MINIMUM.

3. RECOMMENDED PCB THICKNESS : 1.60±0.05 mm

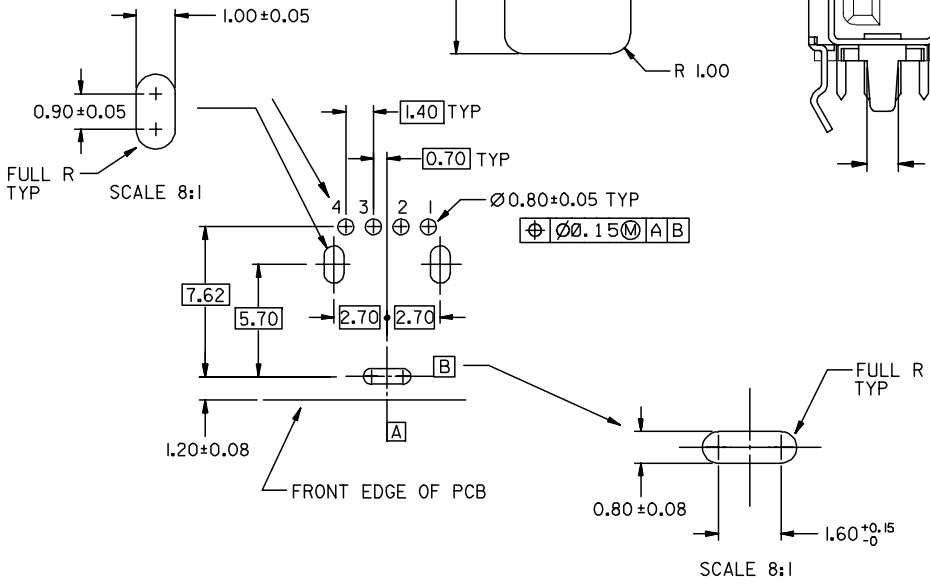
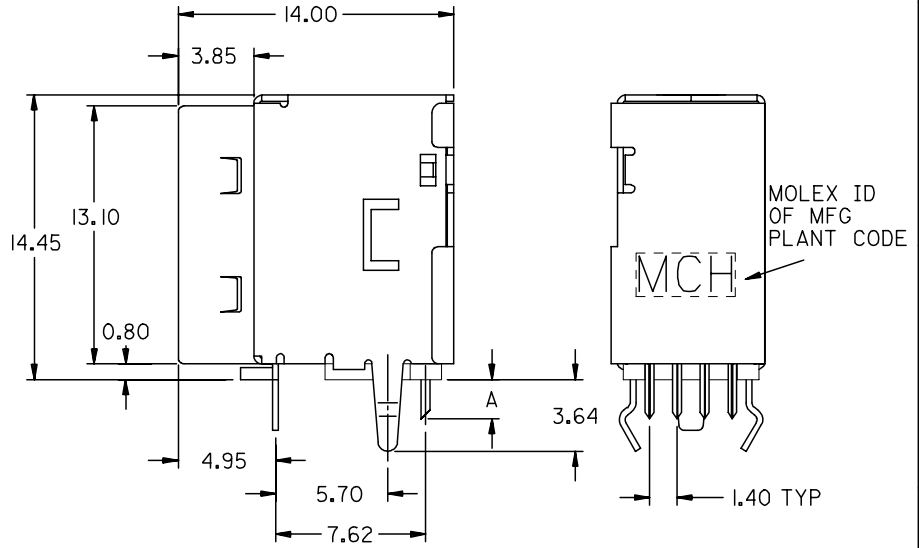
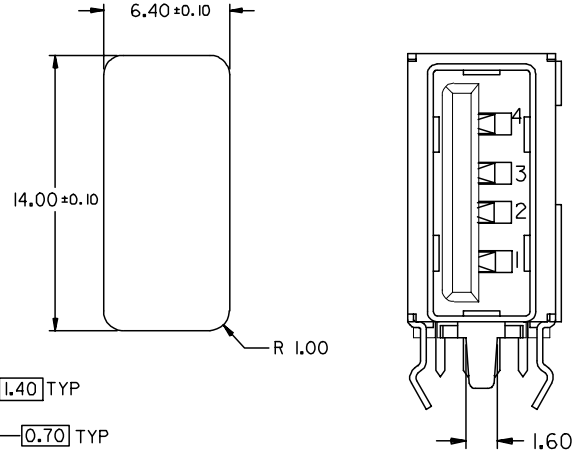
4. PRODUCT SPECIFICATION : REFER TO PS-89485

5. TRAY PACKAGING SPECIFICATION REFER TO : PK-89485-002
 TUBE PACKAGING SPECIFICATION REFER TO : PK-89485-001
 TUBE PACKAGING P/N, PLEASE REFER TO SHEET 2,3

DIMENSION "A"	P/N FOR TRAY PACKING	
2.00 ^{+0.35} _{-0.15}	89485-8000	GOLD FLASH PLATING ON CONTACT AREA
	89485-8001	30 MICRO INCH GOLD PLATING ON CONTACT AREA
2.50 ^{+0.35} _{-0.10}	89485-8002	GOLD FLASH PLATING ON CONTACT AREA
	89485-8003	30 MICRO INCH GOLD PLATING ON CONTACT AREA



Recommended Panel Opening



				MATERIAL : SEE NOTE		 MOLEX TAIWAN LTD. SHEET 1 OF 3	
				FINISH : SEE NOTE			
				WIRE RANGE : N/A		GENERAL TOLERANCES ANGLE : ± 3° DIM : ± .25/.010	
				INS. RANGE : N/A		ENG. NO.: SD-89485-003	
A NEW RELEASE FOR LEAD-FREE LTR REVISION RECORD ECN DR DATE DAVID HJ 2004/11/5 REV A				DRAWN BY DAVID HJ 2004/11/5 APPR'D BY		TITLE : SINGLE PORT UP-RIGHT USB CONNECTOR (LEAD-FREE)	
REVISE ONLY ON CAD SYSTEM				SCALE 4:1			

DO NOT SCALE DRAWING

CAD FILE :

SIMILAR ITEM

EDP NO.

ENG. NO.

8 7 6 5 4 3 2 1

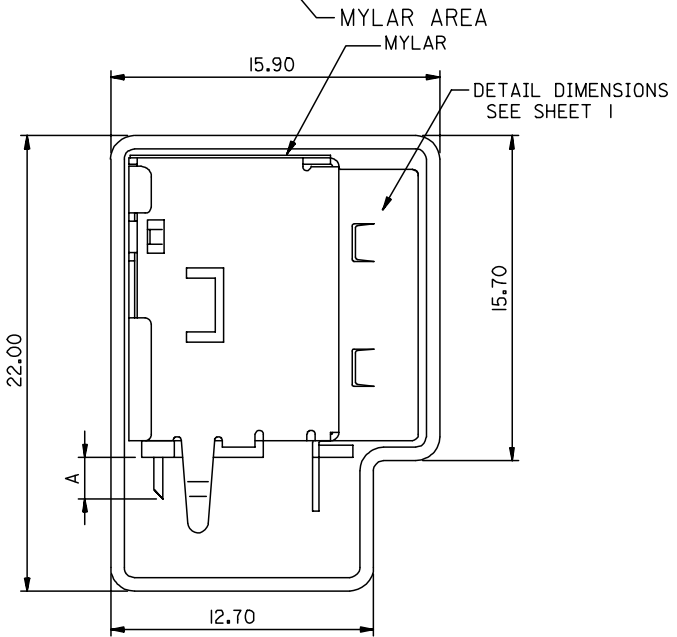
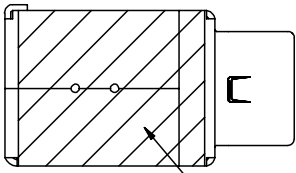
ENG. NO

EDP NO.

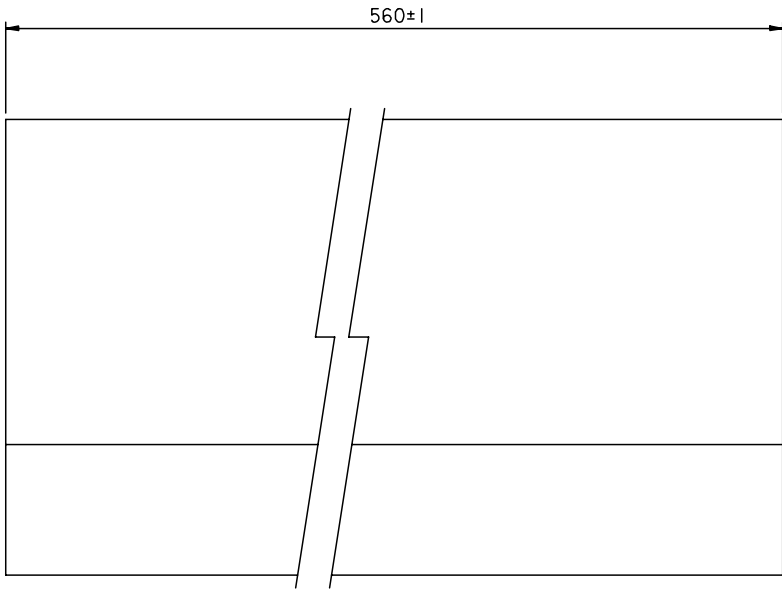
SIMILAR ITEM

CADFILE NO.

DO NOT SCALE DRAWING



NOTE:
 1. DETAIL DIMENSIONS, PLEASE REFER TO SHEET 1 OF SD-89485-003
 2. THE TUBE PACKAGE INCLUDE TWO PLUGS ON RIGHT AND LEFT SIDES.
 3. TUBE PACKAGING SPECIFICATION REFER TO: PK-89485-001



PART NUMBER LEGEND:

P/N FOR TUBE PACKING AND MYLAR ADDITION			
MATERIAL NUMBER	DIMENSION 'A'	PLATING SPECIFICATION	
WITH MYLAR	2.00 ^{+0.35} _{-0.15}	GOLD FLASH PLATING ON CONTACT AREA	
		30 MICRO INCH GOLD PLATING ON CONTACT AREA	
	2.50 ^{+0.35} _{-0.10}	GOLD FLASH PLATING ON CONTACT AREA	
		30 MICRO INCH GOLD PLATING ON CONTACT AREA	

NEW RELEASE EC NO. DRAWN: DAVID HU 2004/10/28 CHK: APPR:	QUALITY SYMBOLS	GENERAL TOLERANCES: (UNLESS SPECIFIED)	SCALE 4 : 1	DESIGN UNITS <input checked="" type="checkbox"/> mm <input type="checkbox"/> INCH	THIRD ANGLE PROJECTION <input type="checkbox"/> mm <input type="checkbox"/> INCH <input checked="" type="checkbox"/> mm ONLY	SHT	REV
	MAJOR = 0 CRITICAL = 0						
A	REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.			

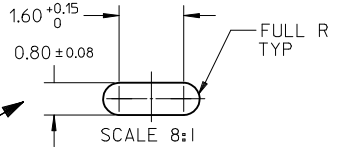
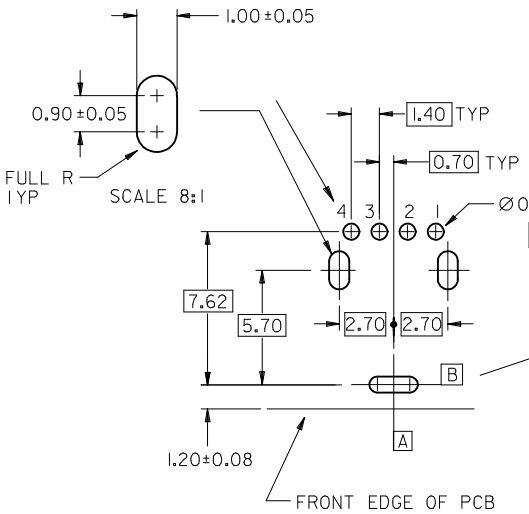
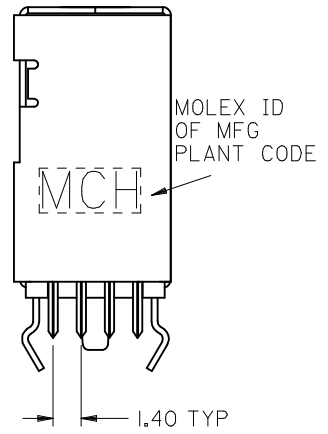
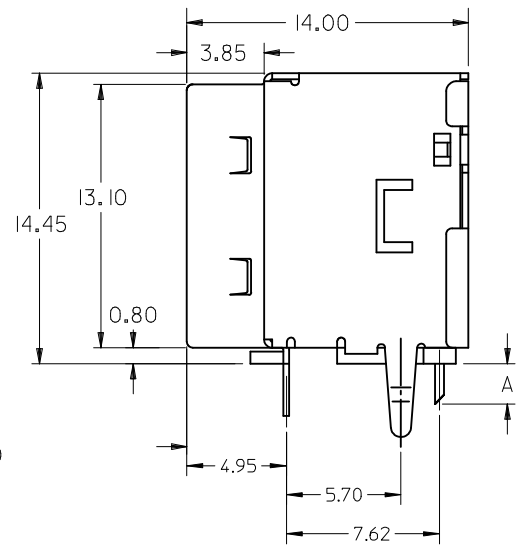
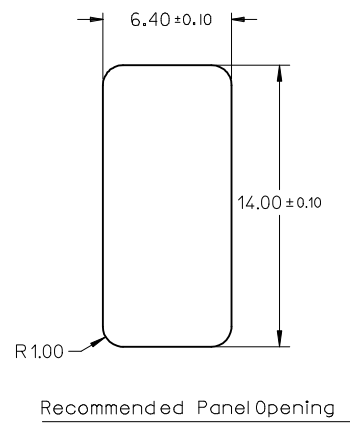
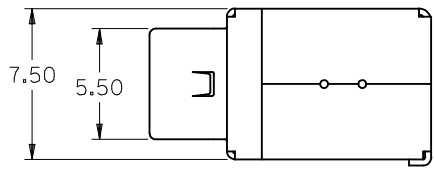
4 PLACES	± .	± .
3 PLACES	± .	± .
2 PLACES	±0.25	±0.10
1 PLACE	±0.25	±0.10
ANGULAR: ±3°		

DRAWN BY & DATE DAVID HU 2004/10/28	TITLE: USB A UPRIGHT 89485 WITH MYLAR BY TUBE PACKAGE (LEAD-FREE)
CHECKED BY & DATE	
APPROVED BY & DATE	
CAD FILENAME S8948503.S02	MATERIAL NO. SEE TABLE
DRAWING NO. SD-89485-003	
SHEET NO. 2	

DIMENSIONS: <input type="checkbox"/> mm <input type="checkbox"/> INCH <input checked="" type="checkbox"/> mm ONLY		REVISE ON CAD ONLY	
MOLEX INCORPORATED			
SIZE A3			

DIMENSION "A"	P/N	PLATING	TERMINAL CONTACT PLATING	TERMINAL SOLDER PLATING	METAL SHELL PLATING
2.00 ^{+0.35} _{-0.15}	89485-8000	SEE NOTES(a)+(d)	GOLD FLASH	75 MICRO INCH BRIGHT TIN	100 MICRO INCH BRIGHT TIN
	89485-8001	SEE NOTES(b)+(d)	30 MICRO INCH GOLD		
2.50 ^{+0.35} _{-0.10}	89485-8002	SEE NOTES(a)+(d)	GOLD FLASH	75 MICRO INCH MATTE TIN	100 MICRO INCH MATTE TIN
	89485-8003	SEE NOTES(b)+(d)	30 MICRO INCH GOLD		
	89485-8012	SEE NOTES(c)+(e)	GOLD FLASH		

NOTE:
 1.MATERIAL:
 HOUSING:HIGH TEMPERATURE NYLON,GLASS FIBRE FILLED,UL94-V0,COLOR:BLACK
 TERMINAL:PHOSPHOR BRONZE
 METAL SHELL:DEEP DRAWN STEEL
 2.PLATING:
 TERMINAL:
 (a)GOLD FLASH ON THE CONTACT AREA,AND 75MICROINCH MINIMUM PURE TIN ON SOLDER TAIL, UNDER 50MICROINCH MINIMUM Ni PLATE.
 (b)30MICROINCH MINIMUM GOLD(Au) ON THE CONTACT AREA, AND 75MICROINCH MINIMUM PURE TIN ON SOLDER TAIL,UNDER 50MICROINCH MINIMUM Ni UNDER PLATE.
 (c)GOLD FLASH ON THE CONTACT AREA,AND 75MICROINCH MINIMUM MATTE TIN ON SOLDER TAIL,UNDER 50MICROINCH MINIMUM Ni PLATE.
 METAL SHELL:
 (d)100MICROINCH MINIMUM BRIGHT TIN ON THE METAL SHELL,AND 50MICROINCH MINIMUM Ni AND 100MICROINCH MINIMUM Cu PLATE.
 (e)100MICROINCH MINIMUM MATTE TIN ON THE METAL SHELL,AND 50MICROINCH MINIMUM Ni AND 100MICROINCH MINIMUM Cu PLATE.
 3.RECOMMENDED PCB THICKNESS:1.60 ±0.05mm
 4.PRODUCT SPECIFICATION:REFER TO PS-89485
 5. TRAY PACKAGING SPECIFICATION REFER TO:PK-89485-002
 TUBE PACKAGING SPECIFICATION REFER TO:PK-89485-001
 TUBE PACKAGING P/N,PLEASE REFER TO:SHEET2,3

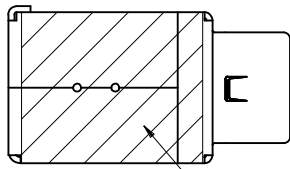


NEW RELEASE EC NO: SH2009-0233 DR:WINEZHAO 2008/12/02 CHKD:RZHANG 2008/12/12 APPR:HWANG 2008/12/17	QUALITY SYMBOLS	DESCRIPTION
	▽=0	
	∇=0	
	REV	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
		MM ONLY	4:1	METRIC	
		mm INCH			
		4 PLACES ± --- ± ---	DRAWN BY	DATE	TITLE
	3 PLACES ± --- ± ---	DAVID HU		SINGLE PORT UP-RIGHT USB CONNECTOR LEAD-FREE	
	2 PLACES ± 0.25 ± .010	CHECKED BY	DATE		
	1 PLACE ± 0.25 ± .010	APPROVED BY	DATE	MOLEX INCORPORATED	
	ANGULAR ± 3 °				
		MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
		SEE TABLE	SD-89485-003	1 OF 3	

SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	
A3		

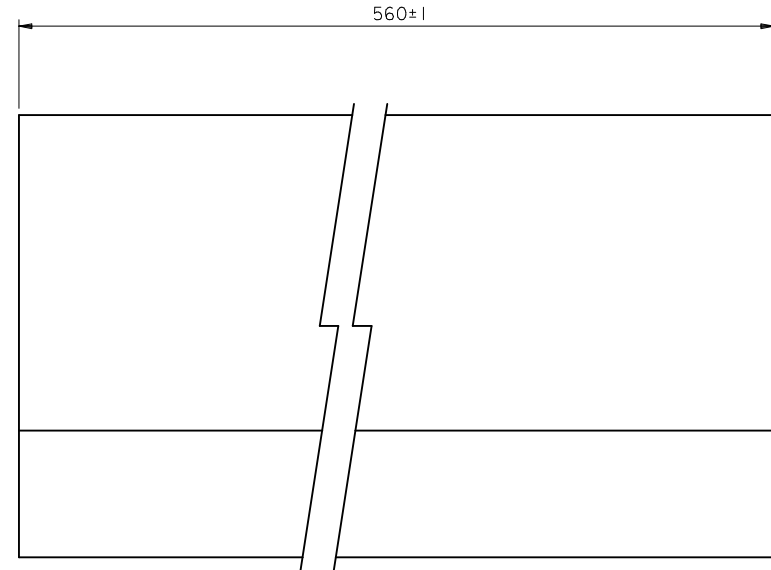
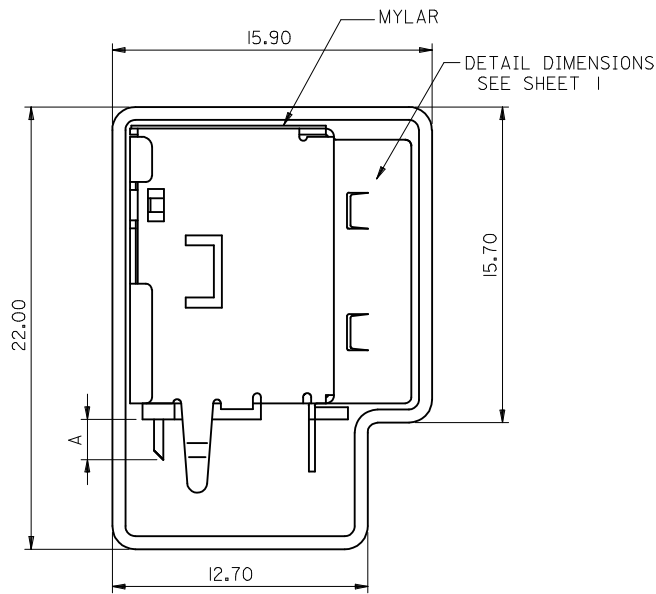
10 9 8 7 6 5 4 3 2 1



MYLAR AREA

NOTE:

1. DETAIL DIMENSIONS, PLEASE REFER TO SHEET 1 OF SD-89485-003
2. THE TUBE PACKAGE INCLUDE TWO PLUGS ON RIGHT AND LEFT SIDES.
3. TUBE PACKAGING SPECIFICATION REFER TO: PK-89485-001



PART NUMBER LEGEND:

P/N FOR TUBE PACKING AND MYLAR ADDITION			
MATERIAL NUMBER	DIMENSION 'A'	PLATING SPECIFICATION	
WITH MYLAR	89485-8100	2.00 ^{+0.35} _{-0.15}	GOLD FLASH PLATING ON CONTACT AREA
	89485-8101		30 MICRO INCH GOLD PLATING ON CONTACT AREA
	89485-8102	2.50 ^{+0.35} _{-0.10}	GOLD FLASH PLATING ON CONTACT AREA
	89485-8103		30 MICRO INCH GOLD PLATING ON CONTACT AREA

NEW RELEASE
 EC NO: SH2009-0233
 DR: WINEZHAO 2008/12/02
 CHK: RZHANG 2008/12/12
 APPR: HWANG 2008/12/17

QUALITY SYMBOLS

 =0
 =0

	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	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		

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE
MATERIAL NO.	SEE TABLE
SIZE	A3

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
4:1	METRIC	
TITLE		
SINGLE PORT UP-RIGHT USB CONNECTOR LEAD-FREE		
MOLEX INCORPORATED		SHEET NO.
DOCUMENT NO. SD-89485-003		2 OF 3
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

10 9 8 7 6 5 4 3 2 1

F

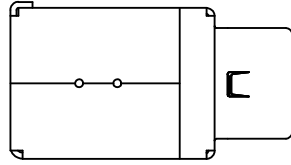
E

D

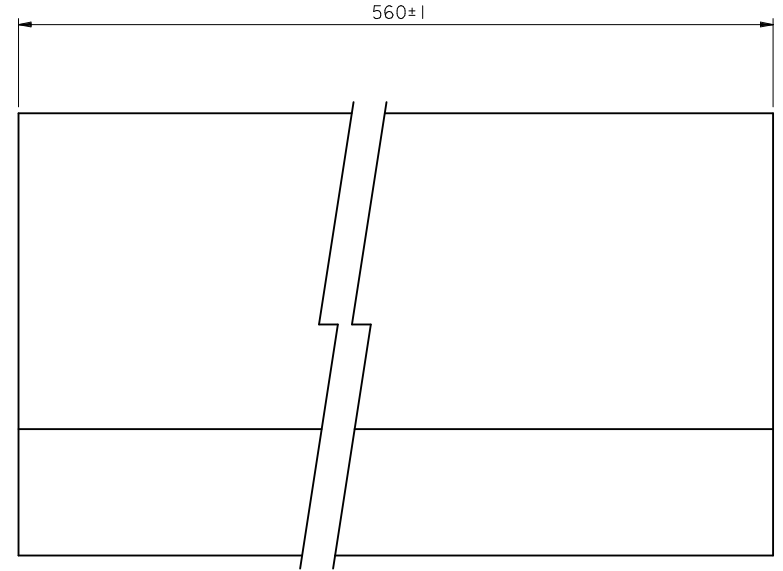
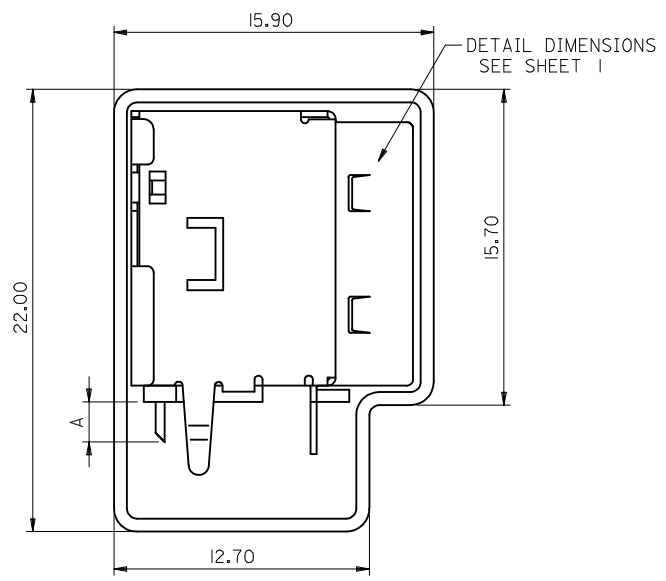
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B

A



NOTE:
 1.DETAIL DIMENSIONS , PLEASE REFER TO SHEET 1 OF SD-89485-003
 2.THE TUBE PACKAGE INCLUDE TWO PLUGS ON RIGHT AND LEFT SIDES.
 3.TUBE PACKAGING SPECIFICATION REFER TO: PK-89485-001



PART NUMBER LEGEND:

P/N FOR TUBE PACKING		
MATERIAL NUMBER	DIMENSION *A	PLATING SPECIFICATION
WITHOUT MYLAR	2.00 ^{+0.35} _{-0.15}	89485-8200 GOLD FLASH PLATING ON CONTACT AREA
		89485-8201 30 MICRO INCH GOLD PLATING ON CONTACT AREA
WITHOUT MYLAR	2.50 ^{+0.35} _{-0.10}	89485-8202 GOLD FLASH PLATING ON CONTACT AREA
		89485-8203 30 MICRO INCH GOLD PLATING ON CONTACT AREA

NEW RELEASE
 EC NO: SH2009-0233
 DR:WNEZHAO 2008/12/02
 CHYKD:RZHANG 2008/12/12
 APPR:HWANG 2008/12/17

QUALITY SYMBOLS

GENERAL TOLERANCES (UNLESS SPECIFIED)

	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

DIMENSION STYLE
MM ONLY

SCALE
4:1

DESIGN UNITS
METRIC

THIRD ANGLE PROJECTION

DRAWN BY DAVID HU
 CHECKED BY
 APPROVED BY
 MATERIAL NO.
SEE TABLE

TITLE
SINGLE PORT UP-RIGHT USB CONNECTOR LEAD-FREE

MOLEX INCORPORATED

DOCUMENT NO. **SD-89485-003** SHEET NO. **3 OF 3**

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9 8 7 6 5 4 3 2 1