

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

**Part Number:** [0877791001](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Pitch Serial ATA Backplane Receptacle, Through Hole, Vertical, SIL, Standard Height, 0.76µm (30µ") Gold (Au) Selective, 22 Circuits, Leadfree

**Documents:**

[3D Model](#) [Product Specification PS-87779-011 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR 19980  
 UL E29179

**General**

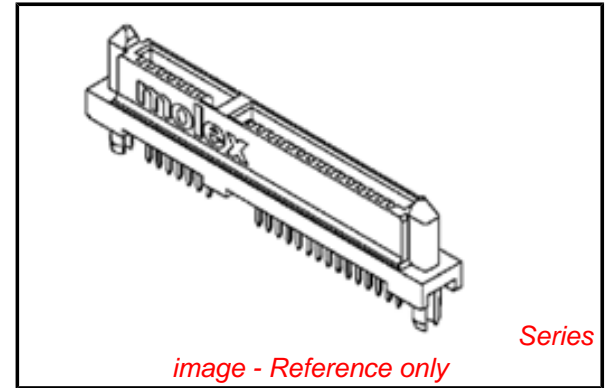
Product Family PCB Receptacles  
 Series [87779](#)  
 Application Board-to-Board  
 Product Literature Order No SNG-029  
 Product Name Serial ATA

**Physical**

Circuits (Loaded) 22  
 Circuits Detail Power 15 pins|Signal 7 pins  
 Durability (mating cycles max) 500  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Lock to Mating Part Yes  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Number of Rows 1  
 Orientation Vertical  
 PC Tail Length (in) 0.136 In  
 PC Tail Length (mm) 3.45 mm  
 PCB Locator Yes  
 PCB Retention None  
 PCB Thickness Recommended (in) 0.031 In, 0.035 In, 0.040 In, 0.042 In, 0.045 In, 0.050 In, 0.055 In, 0.060 In, 0.061 In, 0.062 In, 0.070 In, 0.075 In, 0.080 In, 0.086 In, 0.093 In, 0.098 In  
 PCB Thickness Recommended (mm) 0.80 mm, 0.90 mm, 1.00 mm, 1.07 mm, 1.20 mm, 1.27 mm, 1.40 mm, 1.50 mm, 1.55 mm, 1.60 mm, 1.80 mm, 1.90 mm, 2.00 mm, 2.20 mm, 2.40 mm, 2.50 mm  
 Packaging Type Tray  
 Pitch - Mating Interface (in) 0.050 In  
 Pitch - Mating Interface (mm) 1.27 mm  
 Plating min: Mating (µin) 30.4  
 Plating min: Mating (µm) 0.76  
 Plating min: Termination (µin) 101.6  
 Plating min: Termination (µm) 2.54  
 Polarized to Mating Part Yes  
 Polarized to PCB Yes  
 Surface Mount Compatible (SMC) Yes  
 Temperature Range - Operating -40°C to +105°C  
 Termination Interface: Style Surface Mount

**Electrical**

Current - Maximum per Contact 1.5A



**EU RoHS**

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

**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**

[87779Series](#)

**Mates With**

[87703](#) Serial ATA Combo Plug, [87799](#) Serial ATA Combo Plug

Voltage - Maximum 30V

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 10  
Lead-free Process Capability SMC & Wave Capable (TH only)  
Max. Cycles at Max. Process Temperature 1  
Process Temperature max. C 260

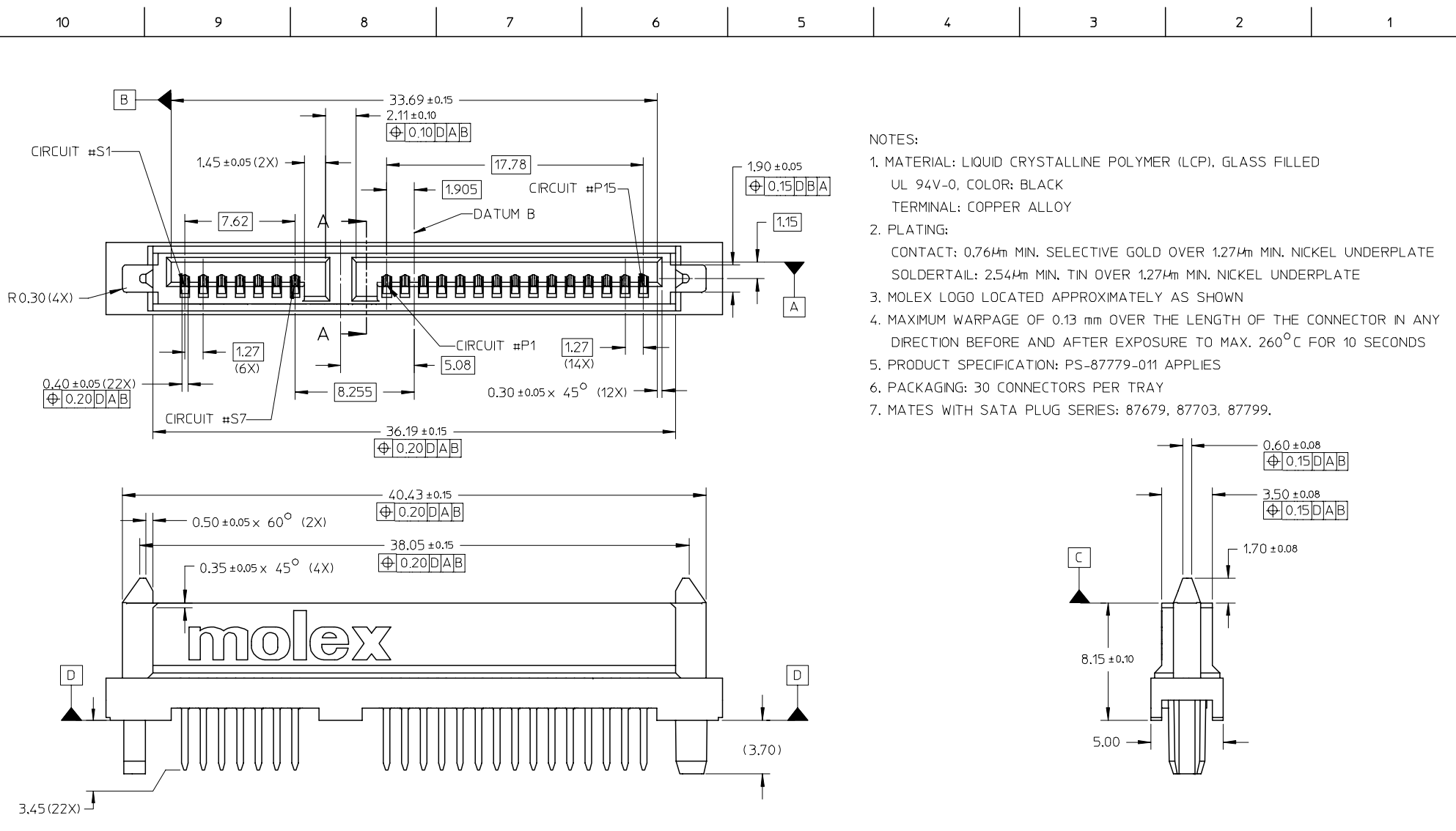
**Material Info**

**Reference - Drawing Numbers**

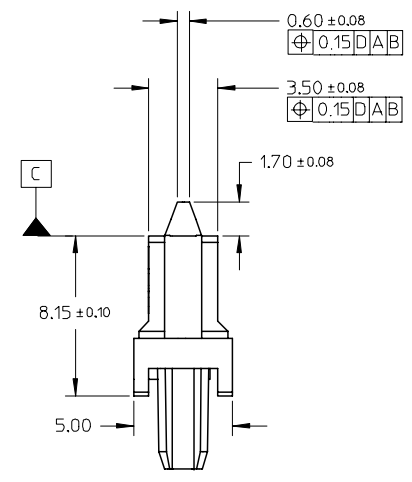
Product Specification PS-87779-011  
Sales Drawing SD-87779-020

This document was generated on 04/09/2010

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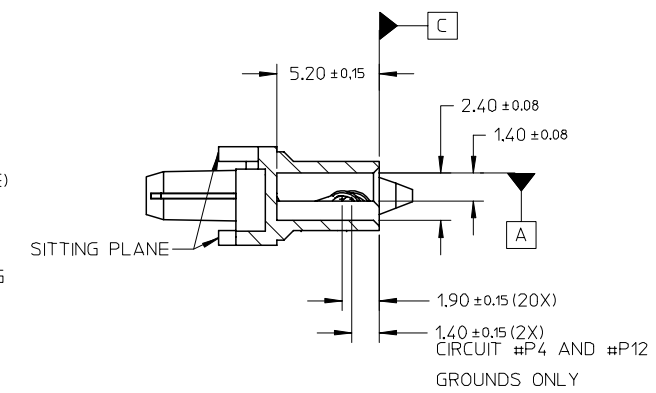
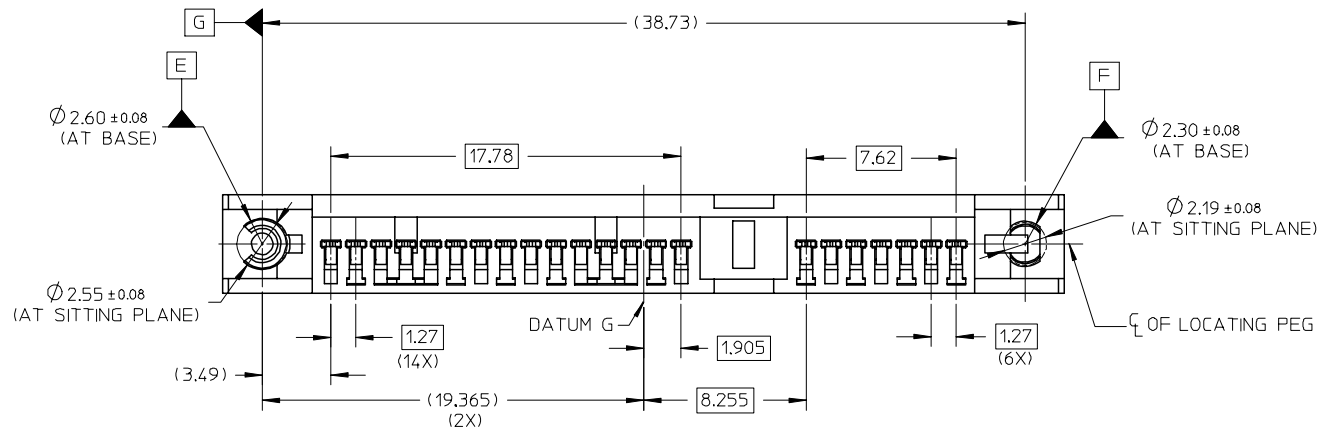
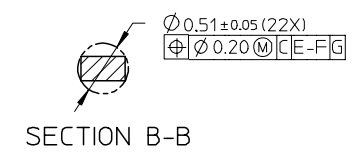
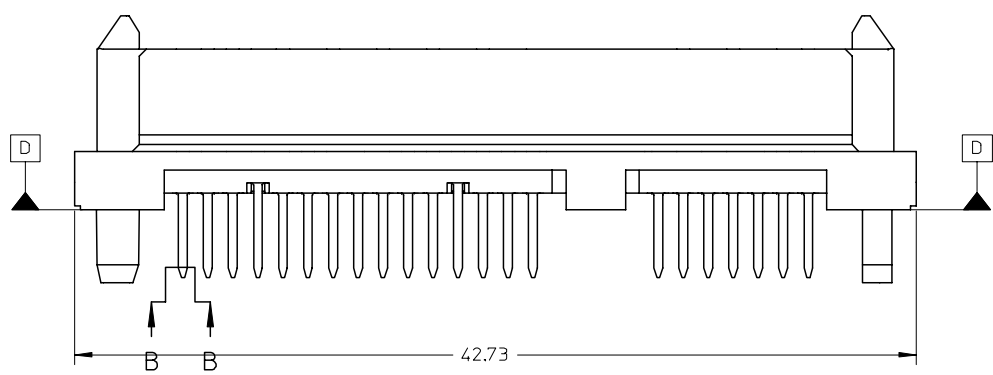
- NOTES:
1. MATERIAL: LIQUID CRYSTALLINE POLYMER (LCP), GLASS FILLED  
UL 94V-0, COLOR: BLACK  
TERMINAL: COPPER ALLOY
  2. PLATING:  
CONTACT: 0.76μm MIN. SELECTIVE GOLD OVER 1.27μm MIN. NICKEL UNDERPLATE  
SOLDERTAIL: 2.54μm MIN. TIN OVER 1.27μm MIN. NICKEL UNDERPLATE
  3. MOLEX LOGO LOCATED APPROXIMATELY AS SHOWN
  4. MAXIMUM WARPAGE OF 0.13 mm OVER THE LENGTH OF THE CONNECTOR IN ANY DIRECTION BEFORE AND AFTER EXPOSURE TO MAX. 260°C FOR 10 SECONDS
  5. PRODUCT SPECIFICATION: PFS-87779-011 APPLIES
  6. PACKAGING: 30 CONNECTORS PER TRAY
  7. MATES WITH SATA PLUG SERIES: 87679, 87703, 87799.



OBS TIN/LEAD P/N EC NO: S2006-0984 2006/04/04 DRWN:MLONG CHKD:CGTAN 2006/04/04 APPR:KCLING 2006/04/04	QUALITY SYMBOLS ▽=0 △=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
				DRAWN BY DKOH	DATE 2003/11/24	TITLE SERIAL ATA, BACKPLANE STD HEIGHT, RECEPT., T/H					
				CHECKED BY KCLING	DATE 2003/12/03	APPROVED BY SKTOH					
				APPROVED BY DATE 2003/12/03			MATERIAL NO. 87779-1001			DOCUMENT NO. SD-87779-020	
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SIZE A3			SHEET NO. 1 OF 4	

10 9 8 7 6 5 4 3 2 1

F  
E  
D  
C  
B  
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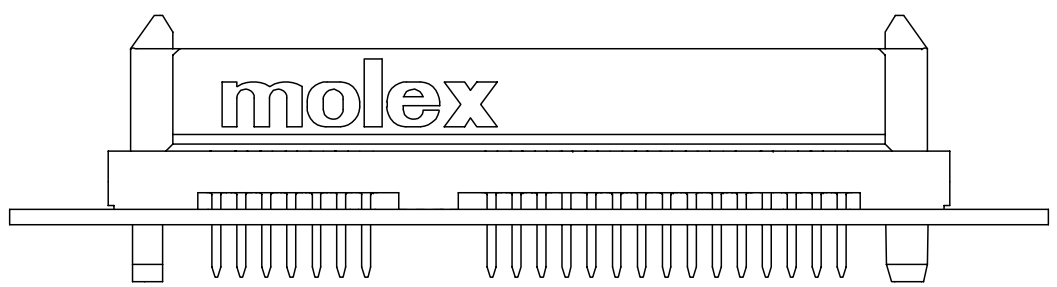
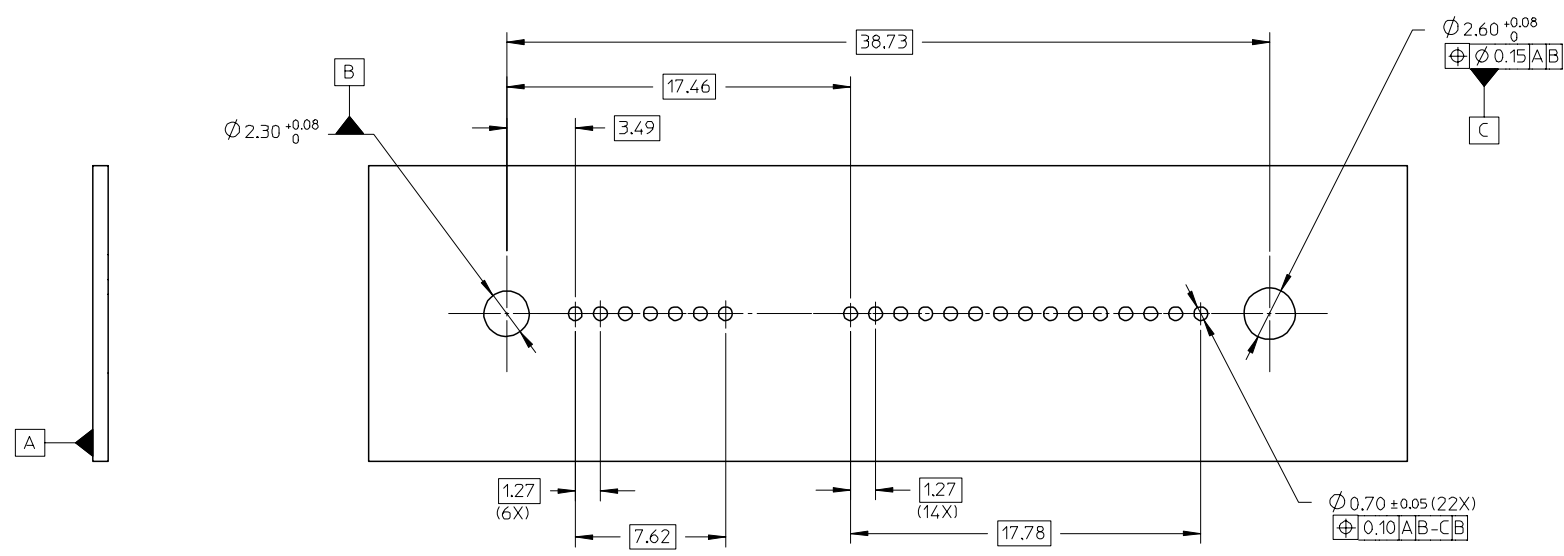
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Rev. D 2004/06/28

9 8 7 6 5 4 3 2 1

OBS TIN/LEAD P/N EC NO: S2006-0984 DRWN:MLONG CHKD:CGTAN APPR:KCLING	REV C	DESCRIPTION 2006/04/04 2006/04/04 2006/04/04	QUALITY SYMBOLS ▽=0 △=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
				mm	INCH	DRAWN BY DKOH	DATE 2003/11/24	TITLE SERIAL ATA, BACKPLANE STD HEIGHT, RECEPT., T/H			
				4 PLACES ± ---	± ---	CHECKED BY KCLING	DATE 2003/12/03				
				3 PLACES ± ---	± ---	APPROVED BY SKTOH	DATE 2003/12/03	MOLEX INCORPORATED			
2 PLACES ± 0.20	± ---	MATERIAL NO. 87779-1001	DOCUMENT NO. SD-87779-020	SHEET NO. 2 OF 4							
1 PLACE ± ---	± ---	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					
		ANGULAR ± 3 °									

10 9 8 7 6 5 4 3 2 1

F  
E  
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B  
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PCB THICKNESS: 0.80 TO 2.54mm  
RECOMMENDED PCB LAYOUT

9 8 7 6 5 4 3 2 1

OBS TIN/LEAD P/N EC NO: S2006-0984 DRWN:MLONG 2006/04/04 CHKD:CGTAN 2006/04/04 APPR:KCLING 2006/04/04	QUALITY SYMBOLS ▽=0 ◻=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			mm	INCH	DRAWN BY DKOH	DATE 2003/11/24	TITLE SERIAL ATA, BACKPLANE STD HEIGHT, RECEPT., T/H			
		4 PLACES	± ---	± ---	CHECKED BY KCLING	DATE 2003/12/03				
		3 PLACES	± ---	± ---	APPROVED BY SKTOH	DATE 2003/12/03				
		± 0.20	± ---	MATERIAL NO. 87779-1001		DOCUMENT NO. SD-87779-020		SHEET NO. 3 OF 4		
		± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MOLEX INCORPORATED				
		ANGULAR ± 3 °		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

F

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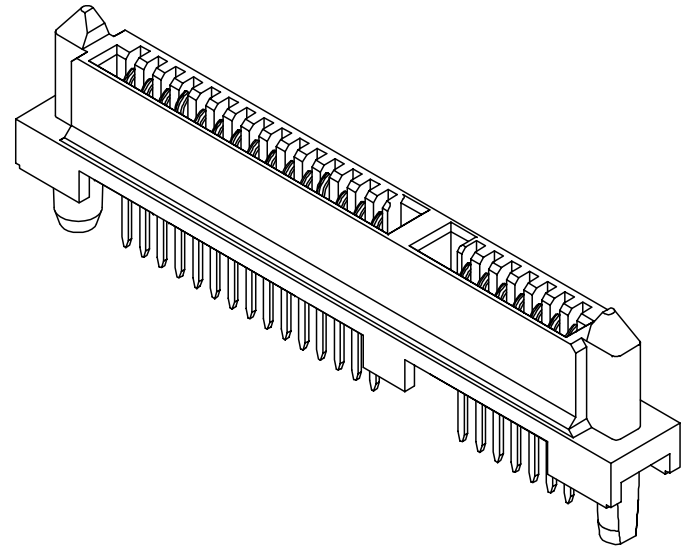
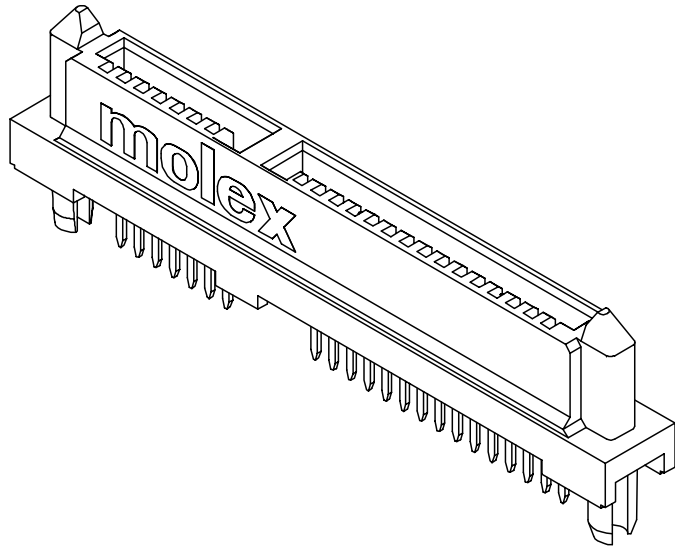
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OBS TIN/LEAD P/N EC NO: S2006-0984 DRWN:MLONG CHKD:CGTAN APPR:KCLING	2006/04/04	DESCRIPTION REV
	2006/04/04	
	2006/04/04	
	2006/04/04	

QUALITY SYMBOLS
▽=0
∇=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm INCH
4 PLACES	± --- ± ---
3 PLACES	± --- ± ---
2 PLACES	± 0.20 ± ---
1 PLACE	± --- ± ---
ANGULAR ± 3 °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE MM ONLY	
DRAWN BY	DATE
DKOH	2003/11/24
CHECKED BY	DATE
KCLING	2003/12/03
APPROVED BY	DATE
SKTOH	2003/12/03
MATERIAL NO. 87779-1001	
SIZE A3	

SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
TITLE SERIAL ATA, BACKPLANE STD HEIGHT, RECEPT., T/H		
MOLEX INCORPORATED		
MATERIAL NO. 87779-1001	DOCUMENT NO. SD-87779-020	SHEET NO. 4 OF 4
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