

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

**Part Number:** [0877050051](#)  
**Status:** **Active**  
**Description:** 1.00mm (.039") Pitch DDR-II DIMM Socket, Vertical, Center Keys, 2.67mm (.105") Tail Length, Beige Latches, with Beveled Metal Pins, 240 Circuits, 0.76µm (30µ") Gold (Au) Plating, Lead-Free

**Documents:**

[3D Model](#) [Product Specification PS-87705-002 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family Memory Module Sockets  
 Series 87705  
 Comments <LI>Latches in Beige Color  
 Component Type Socket  
 JEDEC Outline MO-237  
 Product Name DDR2 DIMM

**Physical**

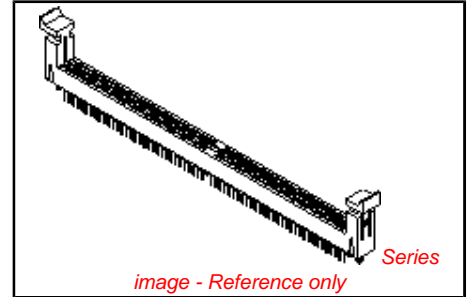
Circuits (Loaded) 240  
 Color - Resin Black, Natural  
 Durability (mating cycles max) 25  
 Entry Angle Vertical (Top Entry)  
 Flammability 94V-0  
 Keying to Mating Part Yes  
 Material - Metal Brass, Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 PC Tail Length (in) 0.105 In  
 PC Tail Length (mm) 2.67 mm  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.062 In  
 PCB Thickness Recommended (mm) 1.60 mm  
 Packaging Type Tray  
 Pitch - Mating Interface (in) 0.039 In  
 Pitch - Mating Interface (mm) 1.00 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  
 Temperature Range - Operating -10°C to +85°C  
 Termination Interface: Style Through Hole

**Electrical**

Current - Maximum per Contact 0.5A  
 Voltage - Maximum 30V  
 Voltage Key 1.8V, Center

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 5  
 Lead-free Process Capability SMC & Wave Capable (TH only)  
 Max. Cycles at Max. Process Temperature 1



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**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**  
[87705Series](#)

**Mates With**  
 JEDEC standard 1.27mm modules

Process Temperature max. C 260

**Material Info**

**Reference - Drawing Numbers**

Product Specification PS-87705-002  
Sales Drawing SD-87705-001

This document was generated on 05/27/2010

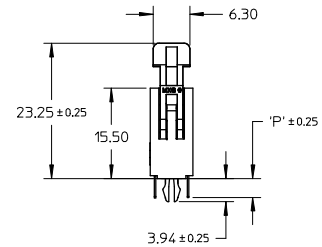
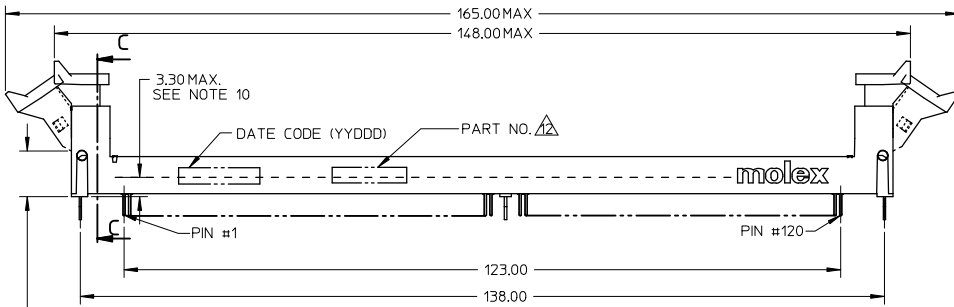
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NOTES:

1. MATERIALS  
 HOUSING - HIGH TEMP. NYLON GLASS FILLED, UL 94V-0  
 COLOR: BLACK  
 EJECTOR - HIGH TEMP. NYLON GLASS FILLED, UL 94V-0  
 COLOR: SEE TABLE  
 TERMINAL - COPPER ALLOY
2. PLATING - SEE TABLE IN SHEET 5 & 6.
3. CARD SLOT ACCEPTS 1.27±0.10 MM MODULE THICKNESS.  
 (MEASURED OVER P.C. PADS)
4. RECOMMENDED MODULE LAYOUT SHALL BE AS PER JEDEC MO-237.
5. REFER TO PRODUCT SPEC. PS-87705-002 FOR PERFORMANCE SPECIFICATIONS.
6. PRODUCT SHALL BE PACKED IN TRAY.
7. PRODUCT SHALL HAVE DATE CODE STAMPED ON SIDE OF HOUSING.
8. KEEP OUT AREA IS THE AREA WHERE THE CONNECTOR IS MOUNTED ONTO THE PCB WHICH DOES NOT INCLUDE THE LATCH.
9. REFER TO CRITICAL JEDEC INFORMATION FOR SOCKET OUTLINE PER S0-001.
10. DIMM MODULE SEATING PLANE FROM TOP OF PCB.
11. CONTACT MOLEX FOR AVAILABILITY OF PRODUCT OPTIONS.

△ PART NUMBER SHALL BE MARKED LEGIBLY AS 87705-\*\*\*\*



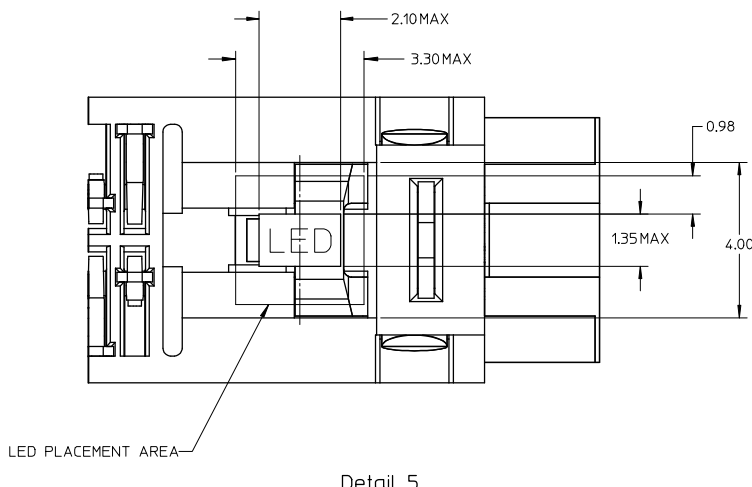
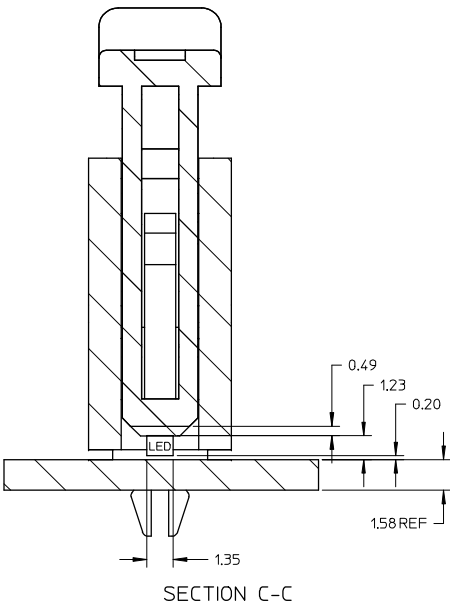
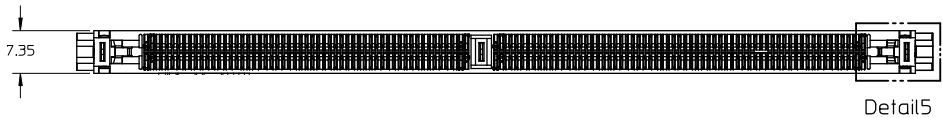
5.00MIN  
LATCH KEEP  
OUT AREA

ADD NOTE @SHT 4 C1 IEC NO: S22008-1044 DRAWN: CMTEO 2008/05/15 CHYK: CGTAN 2008/05/15 APPR: SHLEN 2008/05/15 D1	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		mm	INCH	MM ONLY		NTS	METRIC		
		4 PLACES ± ---	± ---	DRAWN BY	DATE	TITLE			
		3 PLACES ± ---	± ---	CGOH	2002/05/09	DDR2 DIMM, 1.00MM PITCH			
2 PLACES ± 0.20	± ---	CHECKED BY	DATE	240 CKTS (FORKLOCK VERSION)					
1 PLACE ± ---	± ---	DSOH	2002/07/22	MOLEX INCORPORATED					
ANGULAR ± 5 °		APPROVED BY	DATE	MATERIAL NO.		DOCUMENT NO.	SHEET NO.		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SKTOH	2002/07/23	SEE TABLE		SD-87705-001	1 OF 6		
				SIZE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
				A 3					

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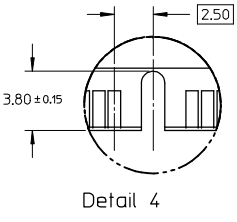
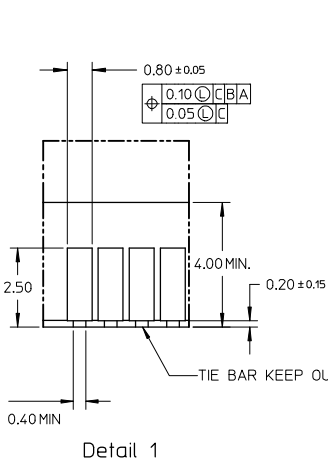
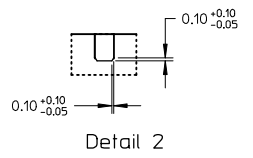
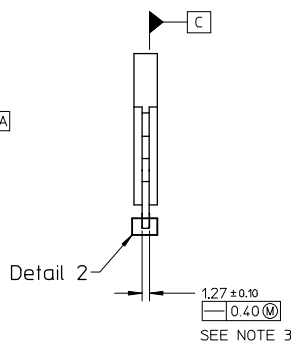
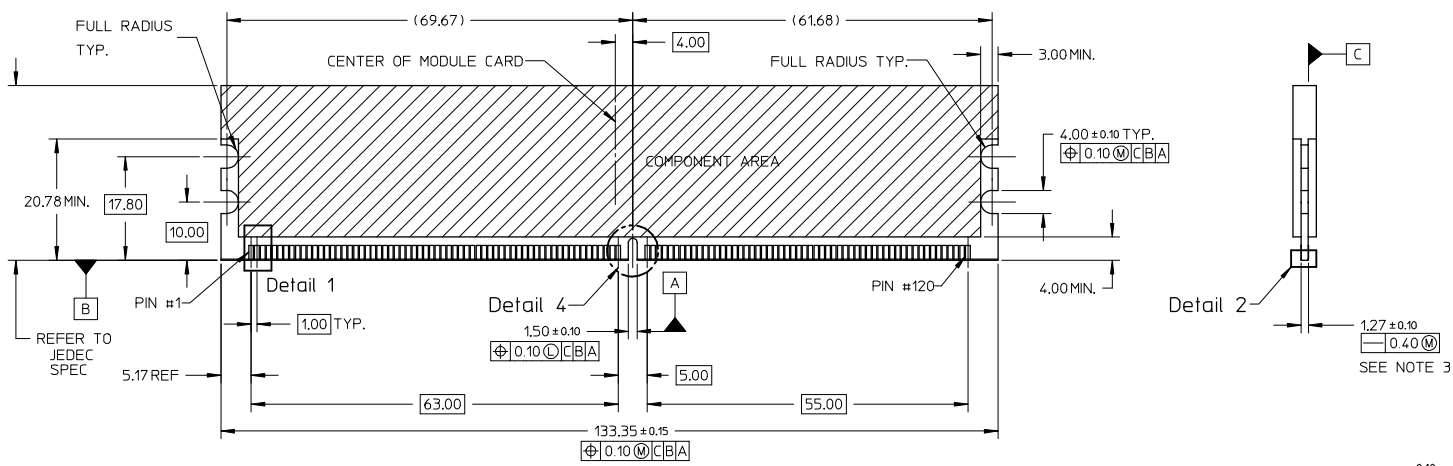


ADD NOTE @SHT4 C1 IEC NO: S22008-1044 D1 DRWN:CNTEO 2008/05/15 CHYK:CGTAN 2008/05/15 APPR:SHLEH 2008/05/15 REV DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$\nabla=0$ $\sphericalangle=0$	mm INCH	MM ONLY	NTS	METRIC	
		4 PLACES ± --- ± ---	DRAWN BY DATE	TITLE	DDR2 DIMM, 100MM PITCH	
		3 PLACES ± --- ± ---	CGOH 2002/05/09	CHECKED BY DATE	240 CKTS	
	2 PLACES ± 0.20 ± ---	DSOH 2002/07/22	APPROVED BY DATE	(FORKLOCK VERSION)		
	1 PLACE ± --- ± ---	SKTOH 2002/07/23	MATERIAL NO.	MOLEX INCORPORATED		
	ANGULAR ± 5 °		SEE TABLE	DOCUMENT NO.	SD-87705-001	SHEET NO. 2 OF 6
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A 3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

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RECOMMENDED MODULE LAYOUT

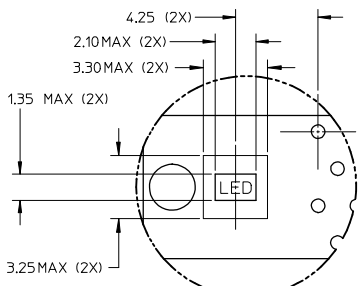


NOTES:  
1. MODULE CARD USED FOR TESTS ARE WITH 0.10MM CHAMFER.

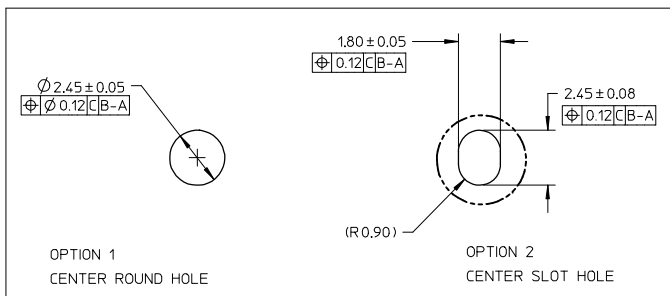
ADD NOTE @SHT 4 C1 EC NO: S22008-1044 DRAWN: MEO 2008/05/15 CHECKED: GTAN 2008/05/15 APPR: SHLEN 2008/05/15 D1	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.20 ± ---	1 PLACE ± --- ± ---	ANGULAR ± 5 °	DRAWN BY CGOH	DATE 2002/05/09	TITLE DDR2 DIMM, 100MM PITCH 240 CKTS (FORKLOCK VERSION)		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					CHECKED BY OSOH	DATE 2002/07/22	MOLEX INCORPORATED		
		MATERIAL NO. SEE TABLE					APPROVED BY SKTOH	DATE 2002/07/23	DOCUMENT NO. SD-87705-001	SHEET NO. 3 OF 6	

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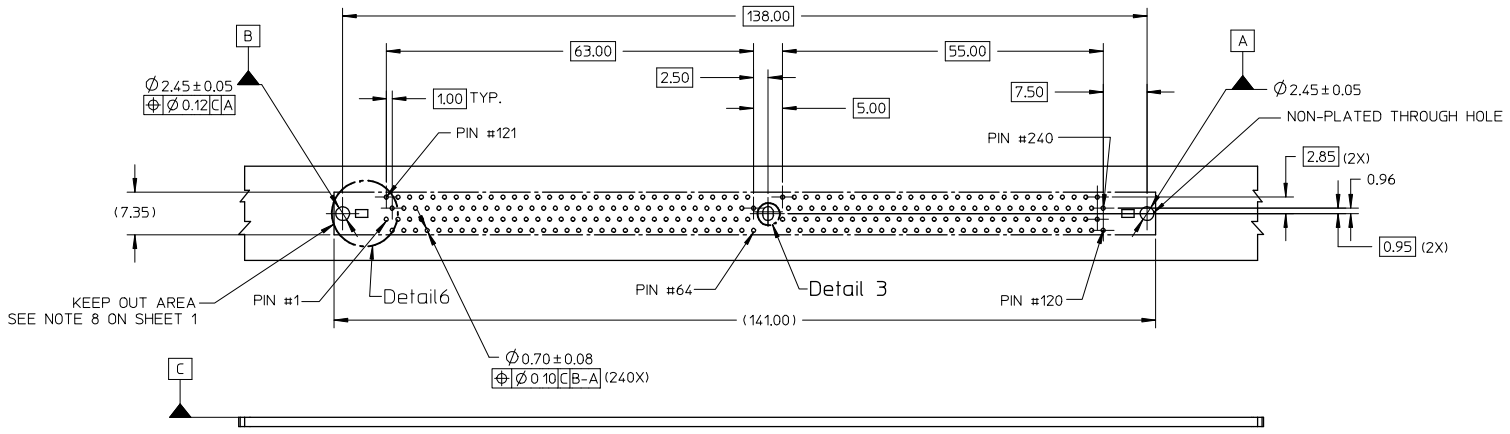


Detail 6



Detail 3





(SEE RECOMMENDED THICKNESS IN TABLE)  
RECOMMENDED PCB LAYOUT  
CONNECTOR SIDE



ADD NOTE @SHT4 C1 IEC NO: S22008-1044 DRAWN: CHYK-CITAN 2008/05/15 CHECKED: CHYK-CITAN 2008/05/15 APPR: SHILEN 2008/05/15 D1 REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION															
	$\nabla=0$ $\sphericalangle=0$	<table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <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>± 0.20</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.20	± ---	1 PLACE	± ---	± ---	MM ONLY	NTS	METRIC	
		mm	INCH																		
	4 PLACES	± ---	± ---																		
3 PLACES	± ---	± ---																			
2 PLACES	± 0.20	± ---																			
1 PLACE	± ---	± ---																			
	ANGULAR ± 5 °																				
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRAWN BY: CGOH CHECKED BY: DS0H APPROVED BY: SKTOH DATE: 2002/05/09 DATE: 2002/07/22 DATE: 2002/07/23	TITLE	DDR2 DIMM, 100MM PITCH 240 CKTS (FORKLOCK VERSION) MOLEX INCORPORATED																
			MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87705-001	SHEET NO. 4 OF 6																

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PART NO.	KEY POS.	DIM 'P'	RECOMMENDED PCB THICKNESS	PLATING OPTION	LATCH COLOR
87705-0021	CENTER (1.8V)	2.67	1.57	0.38uM / 15 uIN MIN. GOLD ON CONTACT, 2.54uM/ 100uIN MIN. TIN ON SOLDER TAILS, 1.27uM/ 50uIN MIN. NICKEL UNDERPLATE	NATURAL
87705-1021		3.18	2.36		
87705-1053		3.66			
87705-0031		2.67	1.57	0.03uM / 1 uIN MIN. GOLD ON CONTACT, 2.54uM/ 100uIN MIN. TIN ON SOLDER TAILS, 1.27uM/ 50uIN MIN. NICKEL UNDERPLATE	
87705-1031		3.18	2.36		
87705-0051		2.67	1.57	0.76uM / 30 uIN MIN. GOLD ON CONTACT, 2.54uM/ 100uIN MIN. TIN ON SOLDER TAILS, 1.27uM/ 50uIN MIN. NICKEL UNDERPLATE	
87705-1051		3.18	2.36		

ADD NOTE @SHT 4 C1 EEC NO: S22008-1044 DRAWN: MIED 2008/05/15 CHYK: CJTAN 2008/05/15 APPR: SHLENI 2008/05/15 D1 REV	DESCRIPTION QUALITY SYMBOLS  = 0  = 0.20 ANGULAR ± 5 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION		
		4 PLACES	± ---	± ---	DRAWN BY CGOH	DATE 2002/05/09	TITLE DDR2 DIMM, 100MM PITCH 240 CKTS (FORKLOCK VERSION)			
		3 PLACES	± ---	± ---	CHECKED BY DS0H	DATE 2002/07/22	 MOLEX INCORPORATED			
		2 PLACES	± 0.20	± ---	APPROVED BY SKTOH	DATE 2002/07/23	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87705-001	SHEET NO. 5 OF 6	
		1 PLACE	± ---	± ---	SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

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PART NO.	KEY POS.	DIM 'P'	RECOMMENDED PCB THICKNESS	PLATING OPTION	LATCH COLOR
87705-5051	CENTER (1.8V)	2.67	1.57	0.76µM / 30 µIN MIN. GOLD ON CONTACT. 2.54µM/ 100µIN MIN. TIN ON SOLDER TAILS, 1.27µM/ 50µIN MIN. NICKEL UNDERPLATE	CLEAR
87705-5151		3.18	2.36		
87705-6151		3.18	2.36	0.38µM / 15 µIN MIN. GOLD ON CONTACT, 2.54µM/ 100µIN MIN. TIN ON SOLDER TAILS, 1.27µM/ 50µIN MIN. NICKEL UNDERPLATE	
87705-9101		2.67	1.57		0.38µM / 15 µIN MIN. GOLD ON CONTACT, 2.54µM/ 100µIN MIN. TIN ON SOLDER TAILS, 1.27µM/ 50µIN MIN. NICKEL UNDERPLATE

ADD NOTE @SHT4 C1 EEC NO: S2008-1044 DRAWN: MIED 2008/05/15 CHECKED: CJTAN 2008/05/15 APPR: SHLENI 2008/05/15 D1 REV	QUALITY SYMBOLS = 0 = 0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
			mm	INCH	DRAWN BY CGOH	DATE 2002/05/09	TITLE DDR2 DIMM, 100MM PITCH 240 CKTS (FORKLOCK VERSION)				
		4 PLACES	± ---	± ---	CHECKED BY DSOH	DATE 2002/07/22	MOLEX INCORPORATED				
		3 PLACES	± ---	± ---	APPROVED BY SKTOH	DATE 2002/07/23	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87705-001	SHEET NO. 6 OF 6		
2 PLACES	± 0.20	± ---	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	
1 PLACE	± ---	± ---	ANGULAR ± 5 °								

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