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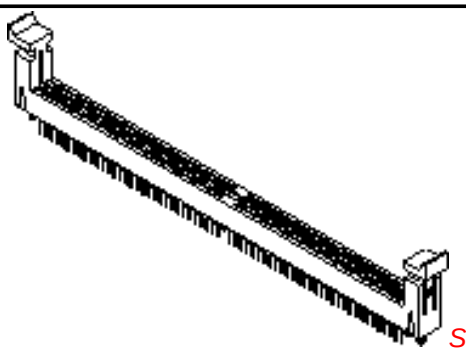
This document was generated on 05/27/2010

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



Series image - Reference only

Documents:

3D Model
Drawing (PDF)
Product Specification PS-87705-002 (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
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

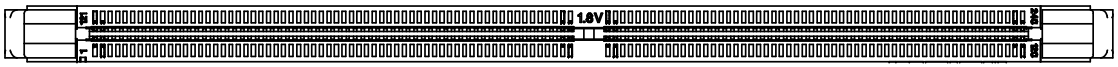
Product Specification	PS-87705-002
Sales Drawing	SD-87705-001

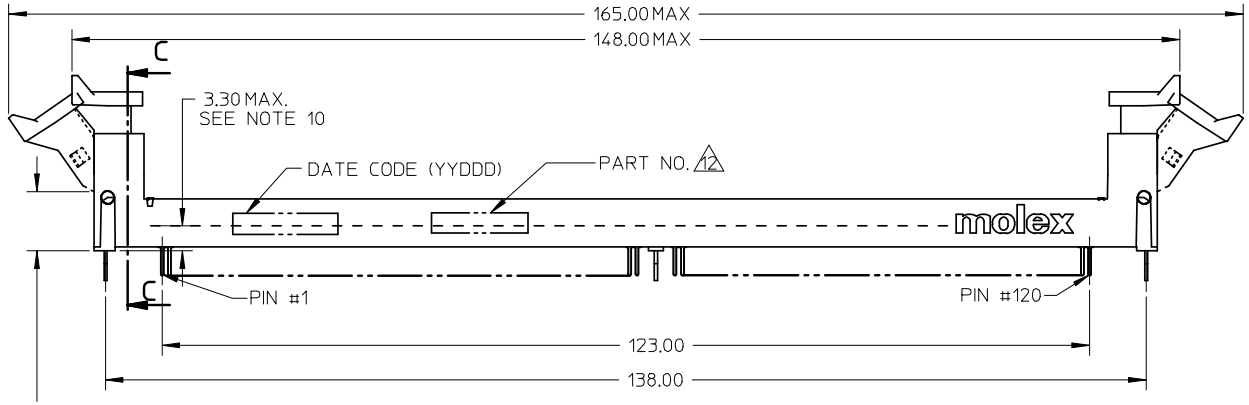
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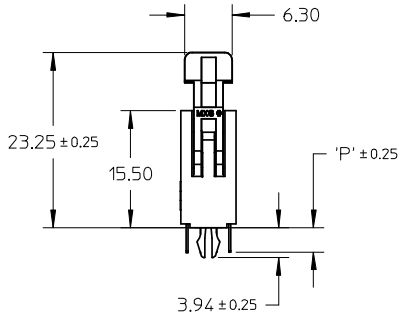
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

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 SO-001.
10. DIMM MODULE SEATING PLANE FROM TOP OF PCB.
11. CONTACT MOLEX FOR AVAILABILITY OF PRODUCT OPTIONS.
12. PART NUMBER SHALL BE MARKED LEGIBLY AS 87705-****







ADD NOTE @SHT4 C1	2008/05/15	DESCRIPTION	
EC NO: S2008-1044	2008/05/15		
DRWN:CMTEO	2008/05/15		
CH'KD:CGTAN	2008/05/15		
APPR:SHLEN1	2008/05/15		
D1		REV	

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.20	± ---
1 PLACE	± ---	± ---
ANGULAR ± 5 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE	MM ONLY	SCALE	NTS
DESIGN UNITS	METRIC		THIRD ANGLE PROJECTION
DRAWN BY	CGOH	DATE	2002/05/09
CHECKED BY	DSOH	DATE	2002/07/22
APPROVED BY	SKTOH	DATE	2002/07/23
MATERIAL NO.	SEE TABLE		

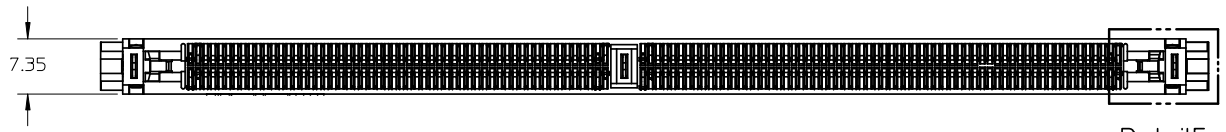
TITLE: DDR2 DIMM, 1.00MM PITCH 240 CKTS (FORKLOCK VERSION)

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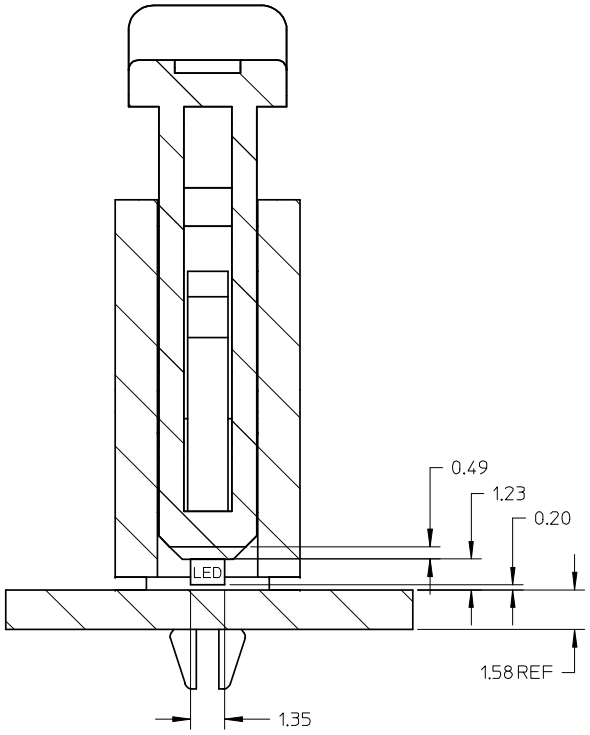
DOCUMENT NO. SD-87705-001 SHEET NO. 1 OF 6

SIZE A3

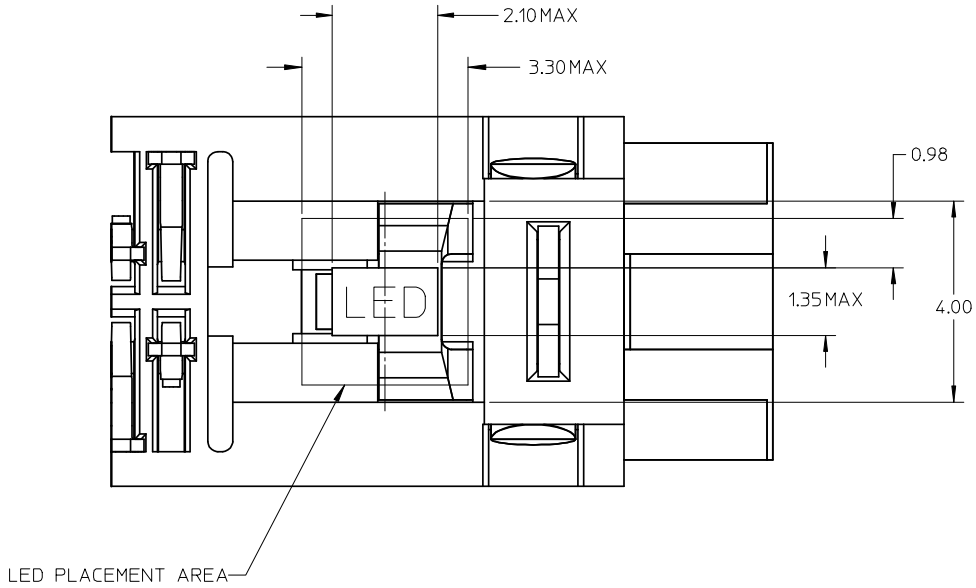
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Detail5



SECTION C-C



Detail 5

ADD NOTE @SHT4 C1
EC NO: S2008-1044 2008/05/15
DRWN:CMTEO 2008/05/15
CHKD:CGTAN 2008/05/15
APPR:SHLEN1 2008/05/15
DESCRIPTION
REV
D1

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.20	± ---
1 PLACE	± ---	± ---
ANGULAR ± 5 °		

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: CGOH DATE: 2002/05/09
CHECKED BY: DSOH DATE: 2002/07/22
APPROVED BY: SKTOH DATE: 2002/07/23
MATERIAL NO.: SEE TABLE

TITLE: DDR2 DIMM, 1.00MM PITCH 240 CKTS (FORKLOCK VERSION)

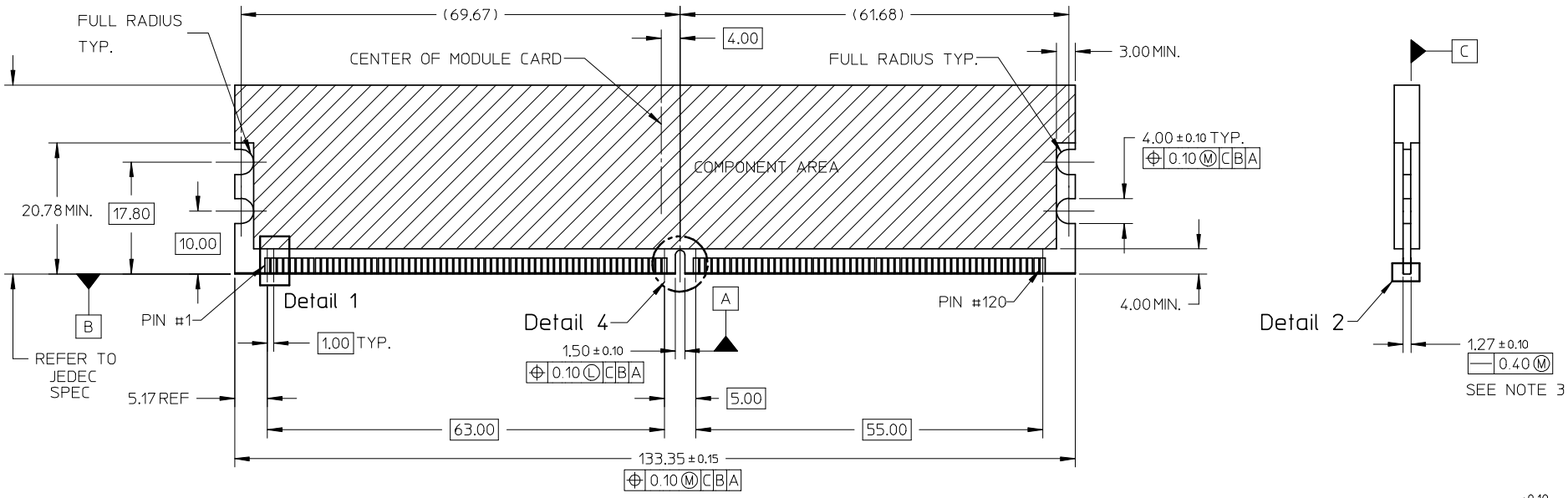
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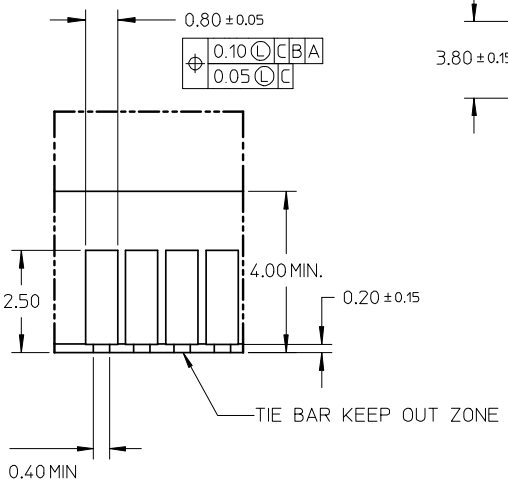
DOCUMENT NO.: SD-87705-001
SHEET NO.: 2 OF 6

SIZE A3

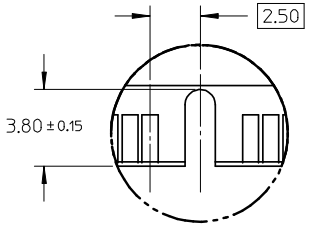
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RECOMMENDED MODULE LAYOUT

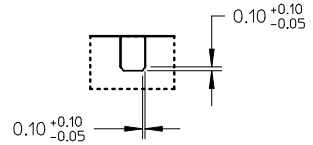




Detail 1



Detail 4



Detail 2

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

ADD NOTE @SHT4 C1
EC NO: S2008-1044 2008/05/15
DRWN:CMTEO 2008/05/15
CH'KD:CGTAN 2008/05/15
APPR:SHLEN1 2008/05/15
DESCRIPTION
REV
D1

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.20	± ---
1 PLACE	± ---	± ---
ANGULAR ± 5 °		

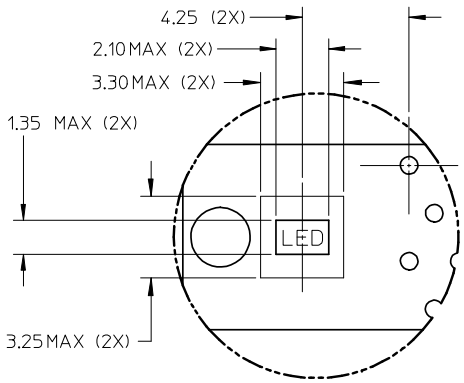
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

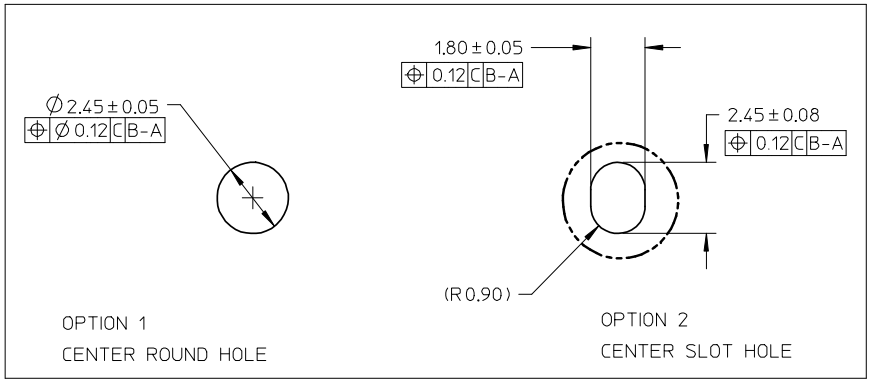
DRAWN BY: CGOH DATE: 2002/05/09
CHECKED BY: DSOH DATE: 2002/07/22
APPROVED BY: SKTOH DATE: 2002/07/23
MATERIAL NO.: SEE TABLE

TITLE: DDR2 DIMM, 1.00MM PITCH 240 CKTS (FORKLOCK VERSION)
MOLEX INCORPORATED
DOCUMENT NO.: SD-87705-001
SHEET NO.: 3 OF 6
SIZE: A3

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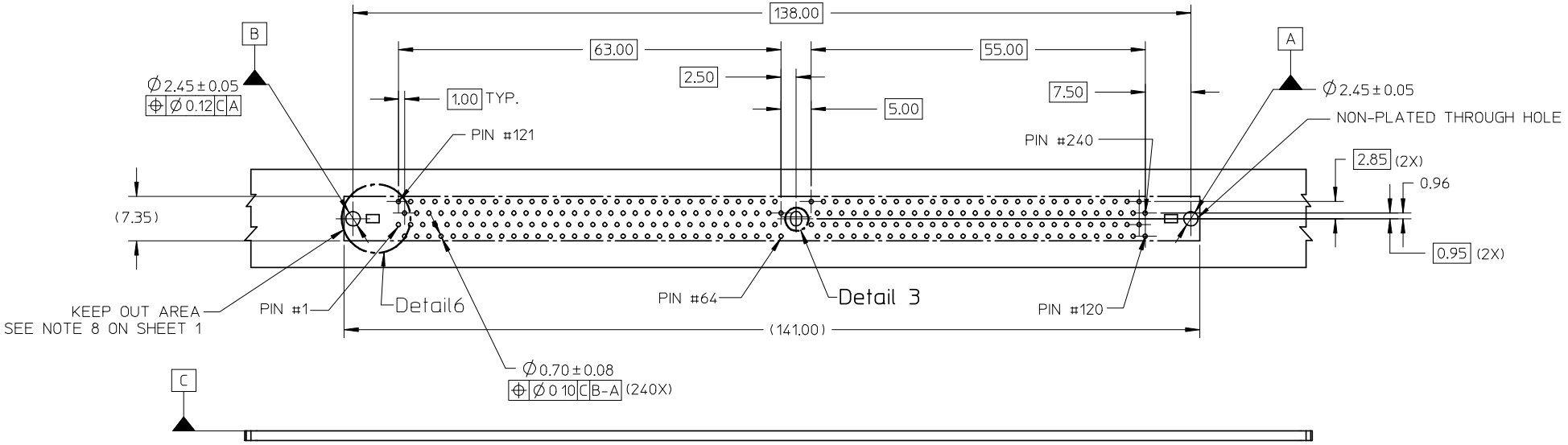


Detail 6



Detail 3

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



ADD NOTE @SHT4 C1	2008/05/15	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
EC NO: S2008-1044	2008/05/15		▼=0		mm / INCH	MM ONLY	NTS	METRIC	
DRWN:CMTEO	2008/05/15		Ⓒ=0	4 PLACES	± --- / ± ---	DRAWN BY: CGOH	DATE: 2002/05/09	TITLE: DDR2 DIMM, 1.00MM PITCH 240 CKTS (FORKLOCK VERSION)	
CHKD:CGTAN	2008/05/15			3 PLACES	± --- / ± ---	CHECKED BY: DSOH	DATE: 2002/07/22		
APPR:SHLENI	2008/05/15			2 PLACES	± 0.20 / ± ---	APPROVED BY: SKTOH	DATE: 2002/07/23	molex MOLEX INCORPORATED	
D1		REV		1 PLACE	± --- / ± ---	MATERIAL NO.: SEE TABLE		DOCUMENT NO.: SD-87705-001	SHEET NO.: 4 OF 6
				ANGULAR ± 5 °					
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE: A3			

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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 SOLDERTAILS, 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 SOLDERTAILS, 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 SOLDERTAILS, 1.27uM/ 50uIN MIN. NICKEL UNDERPLATE	
87705-1051		3.18	2.36		

ADD NOTE @SHT4 C1
EC NO: S2008-1044 2008/05/15
DRWN:CMTEO 2008/05/15
CH'KD:CGTAN 2008/05/15
APPR:SHLEN1 2008/05/15
DESCRIPTION
REV

D1

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.20	± ---
1 PLACE	± ---	± ---

ANGULAR ± 5 °

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: CGOH DATE: 2002/05/09
CHECKED BY: DSOH DATE: 2002/07/22
APPROVED BY: SKTOH DATE: 2002/07/23

TITLE: DDR2 DIMM, 1.00MM PITCH 240 CKTS (FORKLOCK VERSION)

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MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87705-001
SHEET NO.: 5 OF 6

SIZE: A3

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

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

ADD NOTE @SHT4 C1
EC NO: S2008-1044 2008/05/15
DRWN:CMTEO 2008/05/15
CH'KD:CGTAN 2008/05/15
APPR:SHLEN1 2008/05/15
DESCRIPTION
REV

D1

QUALITY SYMBOLS
▼=0
Ⓒ=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
3 PLACES	± ---	± ---
2 PLACES	± 0.20	± ---
1 PLACE	± ---	± ---

ANGULAR ± 5 °

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE: MM ONLY
SCALE: NTS
DESIGN UNITS: METRIC
THIRD ANGLE PROJECTION

DRAWN BY: CGOH DATE: 2002/05/09
CHECKED BY: DSOH DATE: 2002/07/22
APPROVED BY: SKTOH DATE: 2002/07/23

TITLE: DDR2 DIMM, 1.00MM PITCH 240 CKTS (FORKLOCK VERSION)

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MATERIAL NO.: SEE TABLE
DOCUMENT NO.: SD-87705-001
SHEET NO.: 6 OF 6

SIZE: A3

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