

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

**Part Number:** [0877465381](#)  
**Status:** **Active**  
**Description:** 1.00mm (.039") Pitch DDR-II DIMM Socket, Vertical, Press-fit, 1.8V Center Keys, 3.30mm (.130") Tail Length, Blue Housing, Clear Latches, 240 Circuits, 0.76µm (30µ") Selective Gold(Au) Plating, Lead-free

**Documents:**

[3D Model](#)  
[Drawing \(PDF\)](#)

[RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	Memory Module Sockets
Series	87746
Comments	<LI>Latches in Clear Color <LI>Lubricant at the Contact
Component Type	Socket
JEDEC Outline	MO-237
Product Name	DDR2 DIMM

**Physical**

Circuits (Loaded)	240
Color - Resin	Blue, Clear
Durability (mating cycles max)	25
Entry Angle	Vertical (Top Entry)
Keying to Mating Part	Yes
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic, Polysulfone
PC Tail Length (in)	0.130 In
PC Tail Length (mm)	3.30 mm
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.140 In
PCB Thickness Recommended (mm)	3.60 mm
Packaging Type	Tray
Pitch - Mating Interface (in)	0.039 In
Pitch - Mating Interface (mm)	1.00 mm
Plating min: Mating (µin)	30
Plating min: Mating (µm)	0.76
Plating min: Termination (µin)	15
Plating min: Termination (µm)	0.38
Temperature Range - Operating	-55°C to +85°C
Termination Interface: Style	Through Hole - Compliant Pin

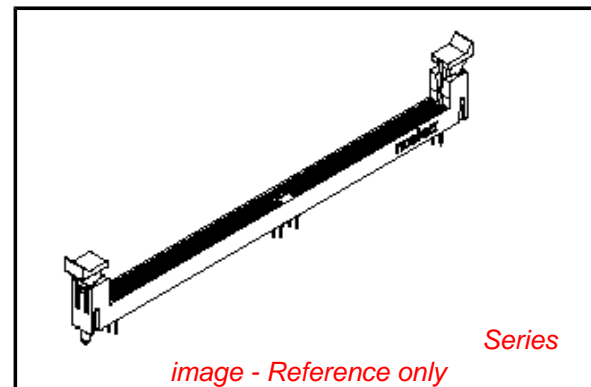
**Electrical**

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

**Material Info**

**Reference - Drawing Numbers**

Sales Drawing	SD-87746-001
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*image - Reference only*

**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](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.

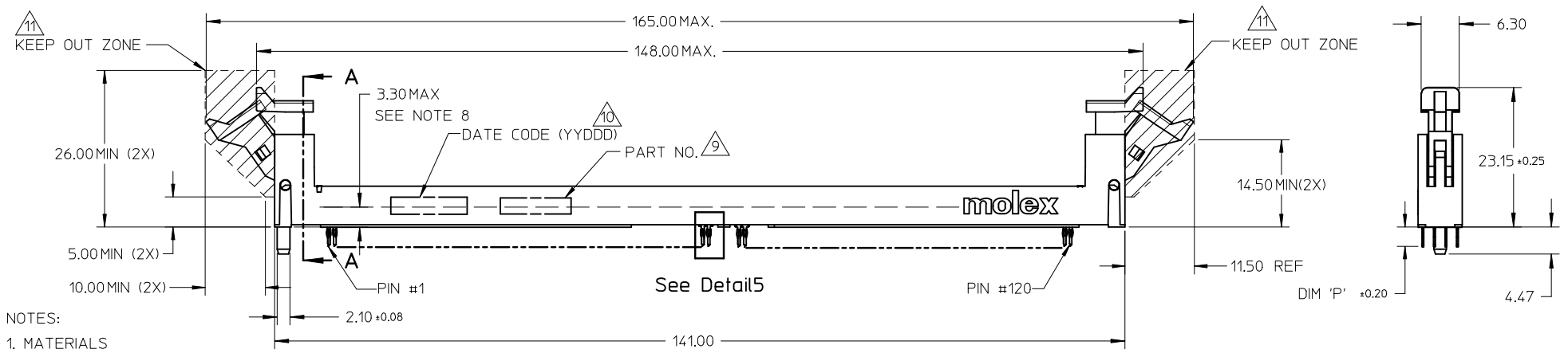
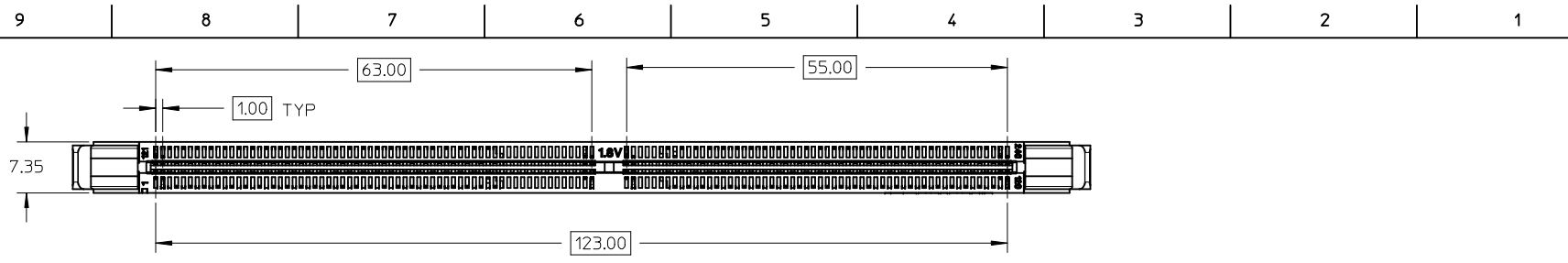
**Search Parts in this Series**

87746Series

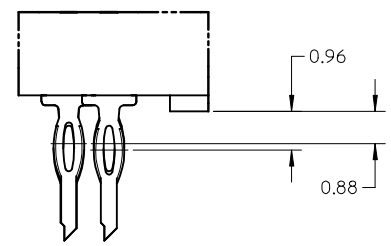
**Mates With**

JEDEC standard 1.27mm modules

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**



- NOTES:
- MATERIALS  
 HOUSING - HIGH TEMP. NYLON, GLASS-FILLED, UL 94V-0.  
 LATCH - HIGH TEMP. NYLON, GLASS-FILLED, UL 94V-0 - NATURAL  
 POLYSULFONE, UL 94HB - CLEAR  
 (COLOUR OF THE HOUSING AND LATCHES REFER TO TABLE ON SHEET 5 & 6).  
 TERMINAL - PHOSPHOR BRONZE
  - FINISHES - CONTACT AREA - SEE TABLE IN SHEET 5.  
 TAIL AREA - 15µIN(0.38µM) TO 60µIN(1.52µM) MIN.  
 90/10 TIN/LEAD OR TIN OVER 50µIN(1.27µM) MIN. NICKEL.
  - REFER TO PRODUCT SPEC. PS-87746-002 FOR PERFORMANCE SPECIFICATIONS.
  - PRODUCT SHALL BE PACKED IN TRAY.
  - CARD SLOT ACCEPTS 1.27±0.10 MM MODULE THICKNESS. (MEASURED OVER P.C. PADS)
  - RECOMMENDED MODULE LAYOUT SHALL BE AS PER JEDEC MO-237.
  - RECOMMENDED PLATING ON MODULE PADS: 30µIN(0.76µM) MIN. HARD GOLD OVER 79µIN(2µM) MIN. NICKEL.
  - DIMM MODULE SEATING PLANE FROM TOP OF PCB.
  - PART NUMBER SHALL BE MARKED LEGIBLY AS : 87746 XXXX
  - DATE CODE SHALL BE MARKED LEGIBLY AS SHOWN : YYDDD
  - KEEP OUT CROSS HATCHED ARE RESERVED FOR SOCKET EJECTORS AT BOTH ENDS.
  - KEEP OUT ZONE IS HEIGHT LIMITED PER 11.



Detail5

1. MATERIALS  
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PART NO UPDATED EC NO: S2009-0883 DRWN: TARUNGHAM 2009/05/22 CHKD: CGTAN 2009/05/22 APPR: SHLENI 2009/05/25	DESCRIPTION D8	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION															
		$\nabla=0$ $\square=0$	<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>± 0.20</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.20	± ---	1 PLACE	± ---	± ---	MM ONLY	NTS	METRIC	
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10 9 8 7 6 5 4 3 2 1

F

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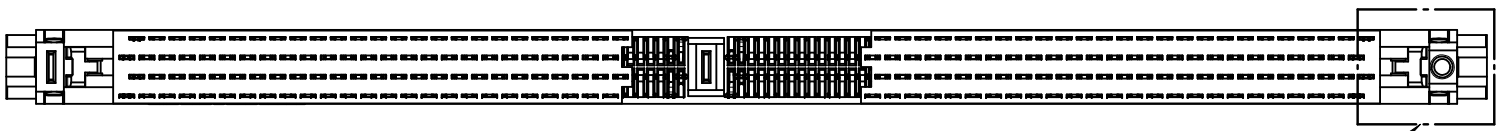
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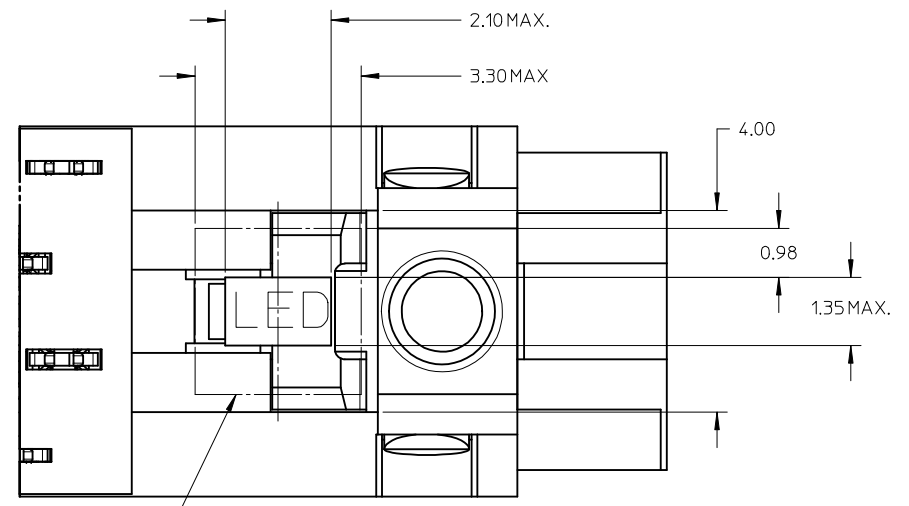
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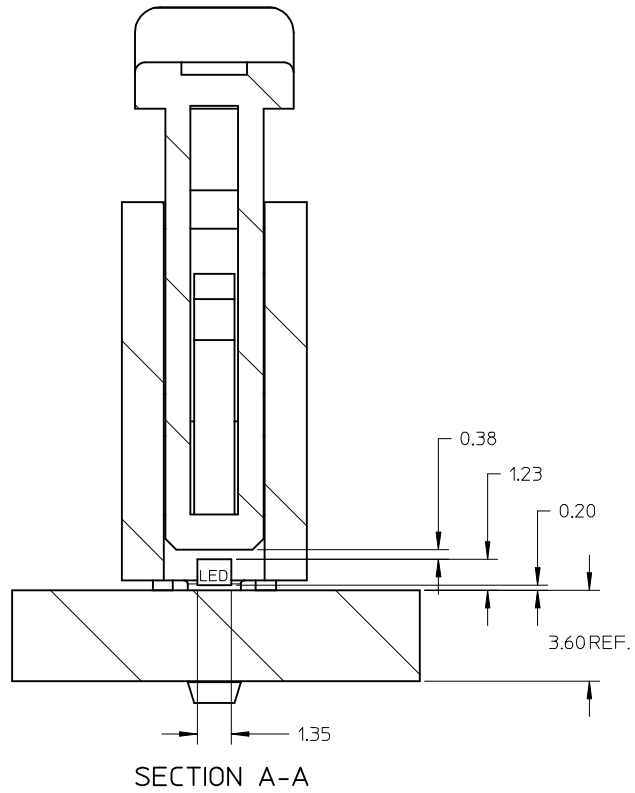


Detail3



Detail3

LED PLACEMENT AREA



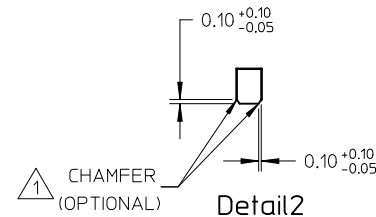
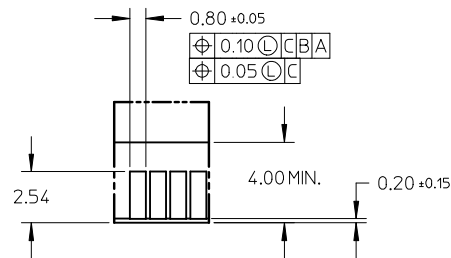
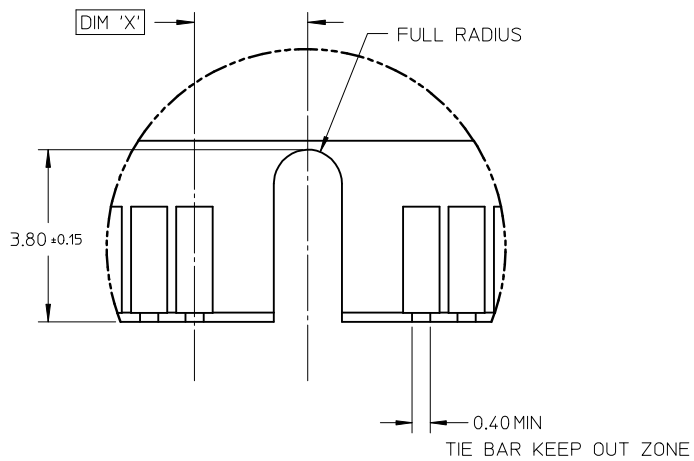
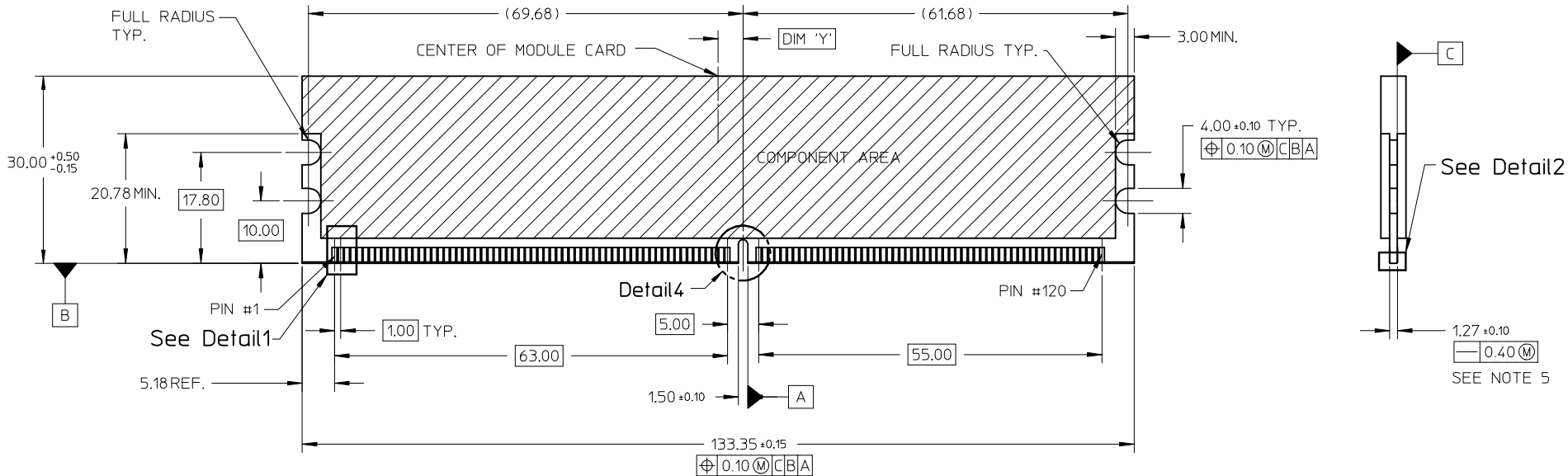
SECTION A-A

PART NO UPDATED EC NO: S2009-0883 DRWN: TARUUGHAM 2009/05/22 CHKD: CGTAN 2009/05/22 APPR: SILENI 2009/05/25	DESCRIPTION D8	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			
			3 PLACES	± ---	± ---	CGOH	2002/06/13	DDR2 DIMM, 100MM PITCH			
			2 PLACES	± 0.20	± ---	CHECKED BY	DATE	240 CKTS, VERT. PRESSFIT			
	1 PLACE	± ---	± ---	DSOH	2002/08/07	MOLEX INCORPORATED SD-87746-001					
	ANGULAR ± 5 °		APPROVED BY	DATE	DOCUMENT NO.					SHEET NO.	
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		SEE TABLE		2 OF 6				
		SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION								
		A3									

9 8 7 6 5 4 3 2 1

10 9 8 7 6 5 4 3 2 1

RECOMMENDED MODULE LAYOUT



KEY LOCATION	VOLTAGE	DIM 'X'	DIM 'Y'
CENTER	1.8V	2.50	4.00

Detail 4

Detail 1

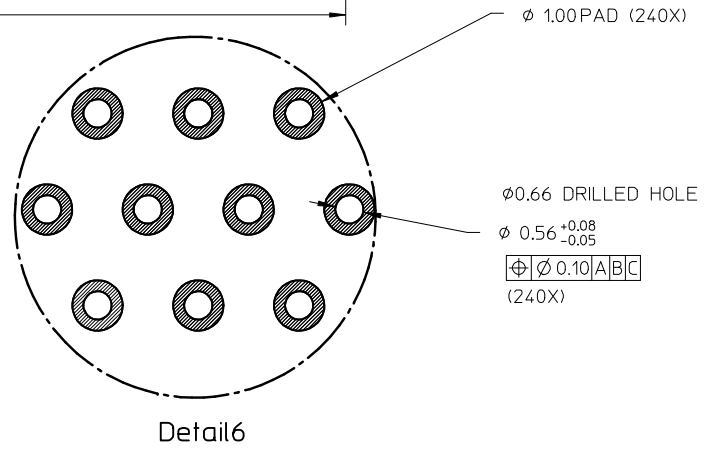
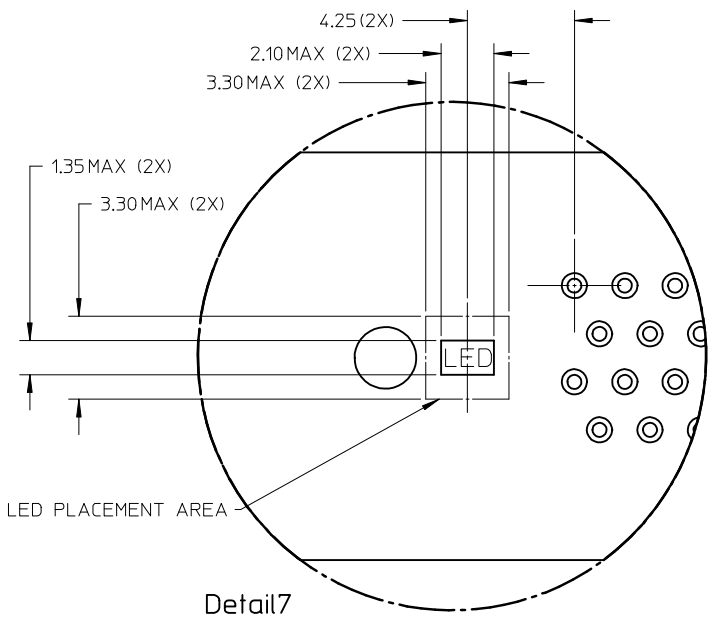
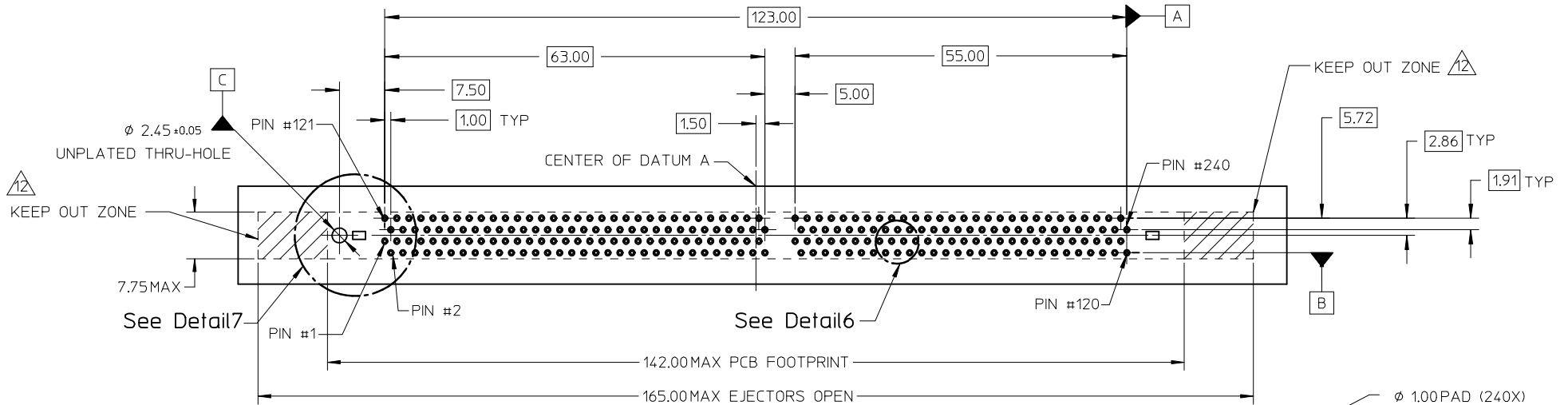
Detail 2

NOTES :  
 1 MODULE CARD USED IN PRODUCT TESTING ARE CHAMFERED.

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	D8		MOLEX INCORPORATED SD-87746-001 SHEET NO. 3 OF 6			

9 8 7 6 5 4 3 2 1

RECOMMENDED PCB HOLE PATTERN  
SEE TABLE IN SHEET 5 FOR  
RECOMMENDED PCB THICKNESS



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		CHECKED BY DSOH	DATE 2002/08/07	<b>MOLEX INCORPORATED</b>																	
		APPROVED BY SKTOH	DATE 2002/08/08	MATERIAL NO. <b>SEE TABLE</b>	DOCUMENT NO. <b>SD-87746-001</b>	SHEET NO. <b>4 OF 6</b>															

PART NO.	VOLTAGE KEY POS.	VOLTAGE KEY TEXT	TAIL LENGTH P±0.20	RECOMMENDED PCB THICKNESS	LUBRICATION	PLATING OPTION	LATCH COLOR	PLATING OPTION	HOUSING COLOR
87746-0001	CENTER	1.8V	4.20	4.57	NO	SELECTIVE GOLD 0.38µM/ 15µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL			
87746-1001			3.30	3.60					
87746-0011	CENTER	1.8V	4.20	4.57	NO	SELECTIVE GOLD 0.76µM/ 30µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL	NATURAL (OFF WHITE)		
87746-1011			3.30	3.60					
87746-0091	CENTER	1.8V	4.20	4.57	YES	SELECTIVE GOLD 0.76µM/ 30µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL		TIN/LEAD	BLACK
87746-1091			3.30	3.60					
87746-5001	CENTER	1.8V	4.20	4.57	NO	SELECTIVE GOLD 0.38µM/ 15µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL			
87746-5101			3.30	3.60					
87746-5011	CENTER	1.8V	4.20	4.57	NO	SELECTIVE GOLD 0.76µM/ 30µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL	CLEAR		
87746-5111			3.30	3.60					
87746-5091	CENTER	1.8V	4.20	4.57	YES	SELECTIVE GOLD 0.76µM/ 30µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL			
87746-5191			3.30	3.60					

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	▼=0 □=0	mm INCH	MM ONLY	NTS	METRIC	
		4 PLACES ± --- ± ---	DRAWN BY DATE	TITLE		
		3 PLACES ± --- ± ---	CGOH 2002/06/13	DDR2 DIMM, 100MM PITCH 240 CKTS, VERT. PRESSFIT		
		2 PLACES ± 0.20 ± ---	CHECKED BY DATE	MOLEX INCORPORATED		
	1 PLACE ± --- ± ---	DSOH 2002/08/07	DOCUMENT NO.			
	ANGULAR ± 5 °	APPROVED BY DATE	SD-87746-001			
		SKTOH 2002/08/08	SHEET NO.			
		MATERIAL NO.	5 OF 6			
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
		SIZE A3				

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87746-8001	CENTER	1.8V	4.20	4.57	NO	SELECTIVE GOLD 0.38µM/ 15µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL			
87746-9001			3.30	3.60					
87746-8011	CENTER	1.8V	4.20	4.57	NO	SELECTIVE GOLD 0.76µM/ 30µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL	NATURAL (OFF WHITE)		
87746-9011			3.30	3.60					
87746-8091	CENTER	1.8V	4.20	4.57	YES	SELECTIVE GOLD 0.76µM/ 30µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL		TIN	BLACK
87746-9091			3.30	3.60					
87746-5201	CENTER	1.8V	4.20	4.57	NO	SELECTIVE GOLD 0.38µM/ 15µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL			
87746-5301			3.30	3.60					
87746-5211	CENTER	1.8V	4.20	4.57	NO	SELECTIVE GOLD 0.76µM/ 30µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL	CLEAR		
87746-5311			3.30	3.60					
87746-5291	CENTER	1.8V	4.20	4.57	YES	SELECTIVE GOLD 0.76µM/ 30µIN MIN. GOLD OVER 1.27µM/ 50µIN MIN. NICKEL			
87746-5391			3.30	3.60					
87746-5381			3.30	3.60					

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			DSOH	2002/08/07	DOCUMENT NO.		
			APPROVED BY	DATE	SD-87746-001		
			SKTOH	2002/08/08	SHEET NO.		
			MATERIAL NO.		6 OF 6		
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