

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

**Part Number:** [0876931311](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Pitch DDR DIMM Socket, Vertical, Press-fit, 2.5V Voltage Keys (Left), 3.32mm (.131") Tail Length, 0.76µm (30µ") Gold (Au) Selective Plating, Clear Latches, 184 Circuits, Leadfree

**Documents:**

[3D Model](#) [Product Specification PS-87693-002 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	Memory Module Sockets
Series	<a href="#">87693</a>
Comments	Latches in Clear Color
Component Type	Memory Module
JEDEC Outline	MO-206
Product Name	DDR DIMM

**Physical**

Circuits (Loaded)	184
Color - Resin	Black, Natural
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)	0.131 In
PC Tail Length (mm)	3.32 mm
PCB Retention	None
PCB Thickness Recommended (in)	0.140 In
PCB Thickness Recommended (mm)	3.60 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)	15.2
Plating min: Termination (µm)	0.38
Temperature Range - Operating	-10°C to +85°C
Termination Interface: Style	Through Hole - Compliant Pin

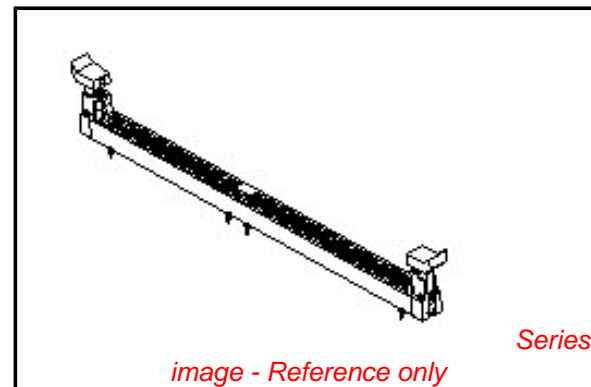
**Electrical**

Current - Maximum per Contact	1A
Voltage - Maximum	50V
Voltage Key	2.5V, Left

**Material Info**

**Reference - Drawing Numbers**

Product Specification	PS-87693-002
Sales Drawing	SD-87693-202



*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**

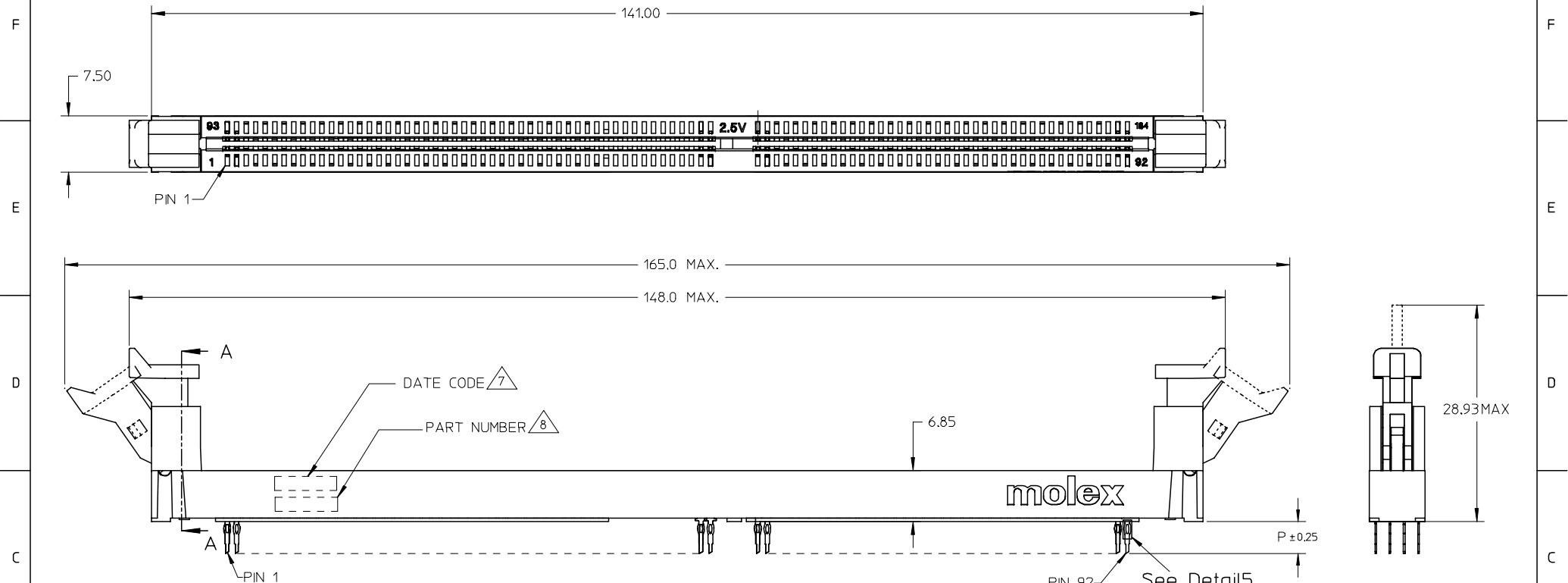
[87693Series](#)

**Mates With**

JEDEC standard 1.27mm modules

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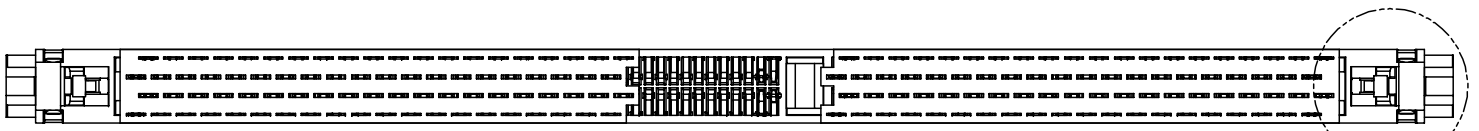


- NOTES:
- CARD SLOT ACCEPTS 1.27±0.10 MODULE THICKNESS. (MEASURED OVER P.C.PADS)
  - RECOMMENDED MODULE LAYOUT SHALL BE PER SHEET 3.
  - RECOMMENDED PLATING ON MODULE PADS: 30u"/0.76uM MINIMUM HARD GOLD OVER 79u"/2uM MINIMUM NICKEL.
  - MATERIAL: HOUSING & LATCH - HIGH TEMP. NYLON, GLASS FILLED, UL 94V-0  
HOUSING COLOUR:  
NATURAL (OFF WHITE) OR BLACK PER SHEET 5  
LATCH COLOR:  
CLEAR OR BLACK PER SHEET 5  
TERMINAL - COPPER ALLOY
  - FINISHES: CONTACT AREA: SEE TABLE PER SHEET 5  
TAIL AREA: 0.38um(15u") TO 1.52um(60u") TIN/LEAD OR TIN OVER 1.27um(50u") MIN. NICKEL
  - PRODUCT IS PACKAGED IN TRAY.  
DATE CODE SHALL BE MARKED LEGIBLY AS YYDD.  
PART NUMBER SHALL BE MARKED LEGIBLY AS : 87693-XXXX.

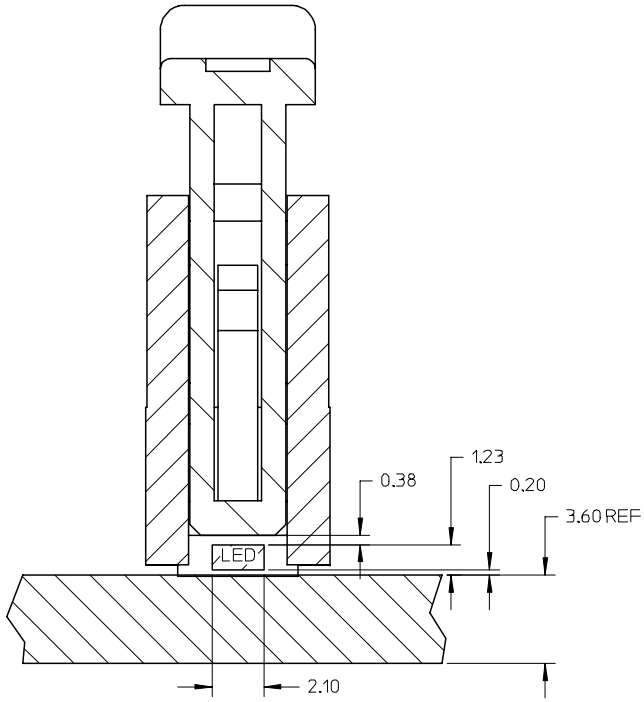
VOID P/N EC NO: S2007-0215 DRWN:SKANG 2006/09/11 CHKD:MLONG 2006/09/13 APPR:SKTOH 2006/09/18	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		▽=0 ∇=0	mm	INCH	DRAWN BY	DATE	NTS	METRIC	TITLE	
			4 PLACES ± --- ± ---	VSKHOANG 2004/02/10	TITLE	DDR DIMM, 1.27MM PITCH 184 CKTS, LIGHTPIPE VERTICAL PRESS-FIT				
			3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± ---	CHECKED BY	DATE	MOLEX INCORPORATED				
		ANGULAR ± 3 °	APPROVED BY	DATE	DOCUMENT NO.	SD-87693-202		SHEET NO. 1 OF 5		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE							
			SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

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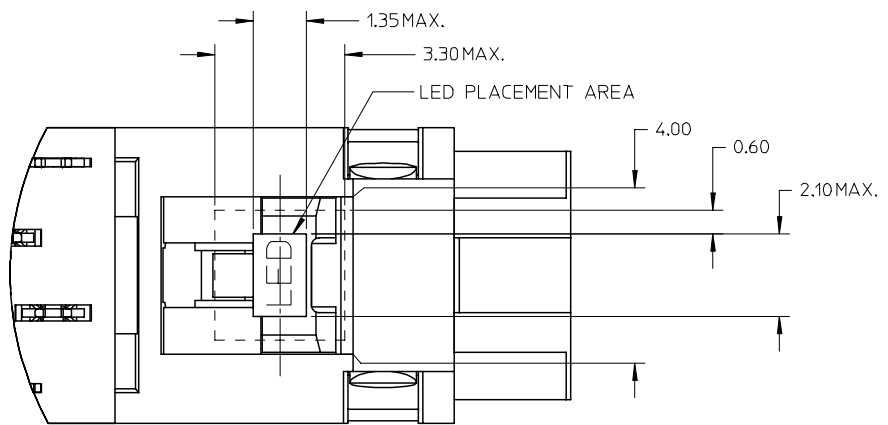
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Detail2



SECTION A-A



Detail2

VOID P/N EC NO: S2007-0215 DRWN:SKANG CHKD:MLONG APPR:SKTOH	DESCRIPTION 2006/09/11 2006/09/13 2006/09/18	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
		$\nabla=0$ $\nabla C=0$	4 PLACES	± ---	± ---	DRAWN BY VSKHOANG	DATE 2004/02/10	TITLE	DDR DIMM, 1.27MM PITCH 184 CKTS, LIGHTPIPE VERTICAL PRESS-FIT		
			3 PLACES	± ---	± ---	CHECKED BY PTL IM	DATE 2004/02/10				
			2 PLACES	± 0.20	± ---	APPROVED BY SKTOH	DATE 2004/02/10	MOLEX INCORPORATED	DOCUMENT NO. SD-87693-202	SHEET NO. 2 OF 5	
	1 PLACE	± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE					

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10 9 8 7 6 5 4 3 2 1

F

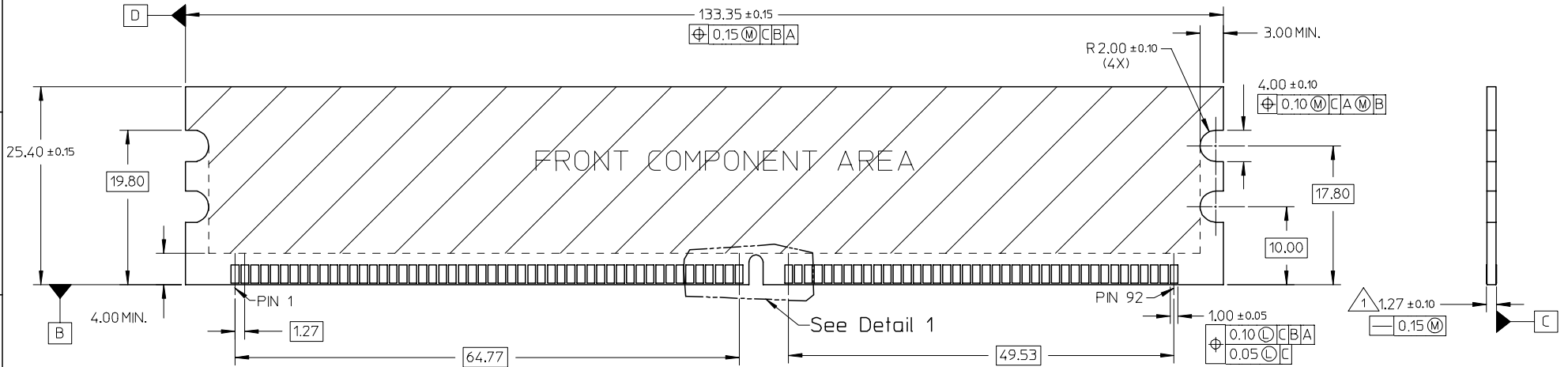
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NOTES:

- 1 CARD THICKNESS APPLIES ACROSS THE CONTACTS AND INCLUDES PLATING AND/OR METALIZATION. STRAIGHTNESS CALLOUT APPLIES TO ZONE DEFINED BY THE 4.00 CONTACT AREA DIMENSION FOR THE ENTIRE LENGTH OF 133.35.

E

E

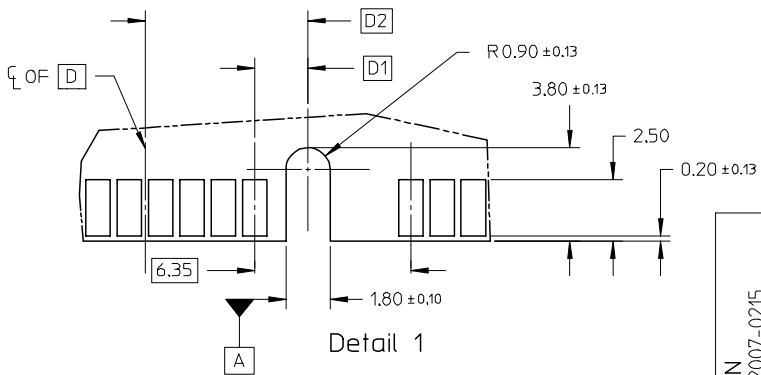


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B

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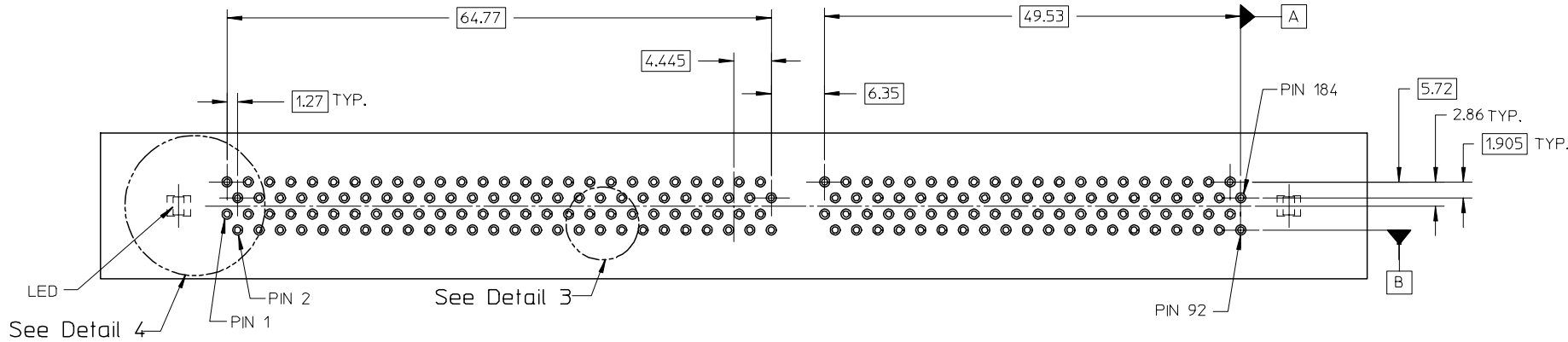
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VOID P/N EC NO: S2007-0215 DRWN:SKANG CHKD:MLONG APPR:SKTOH 2006/09/11 2006/09/13 2006/09/18	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <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> <tr> <td colspan="3">ANGULAR ± 3 °</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.20	± ---	1 PLACE	± ---	± ---	ANGULAR ± 3 °			DIMENSION STYLE MM ONLY DRAWN BY VSKHOANG DATE 2004/02/10 CHECKED BY PTL IM DATE 2004/02/10 APPROVED BY SKTOH DATE 2004/02/10	SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION	TITLE DDR DIMM, 1.27MM PITCH 184 CKTS, LIGHTPIPE VERTICAL PRESS-FIT MOLEX INCORPORATED
		mm	INCH																				
	4 PLACES	± ---	± ---																				
	3 PLACES	± ---	± ---																				
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ANGULAR ± 3 °																							
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87693-202	SHEET NO. 3 OF 5																				
SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																						

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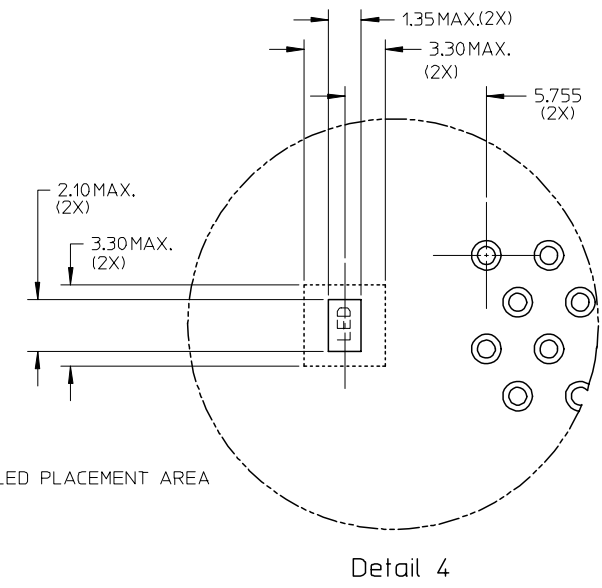
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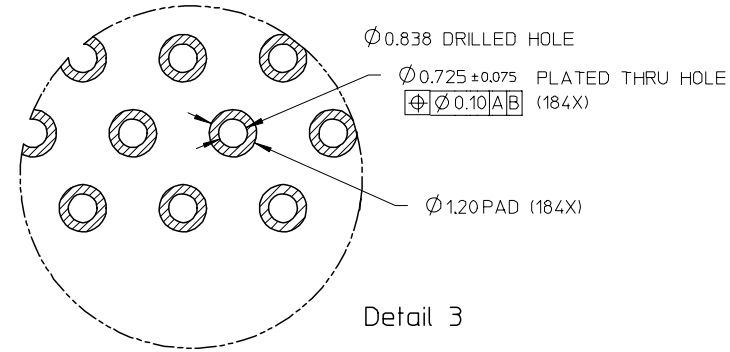


See Detail 3

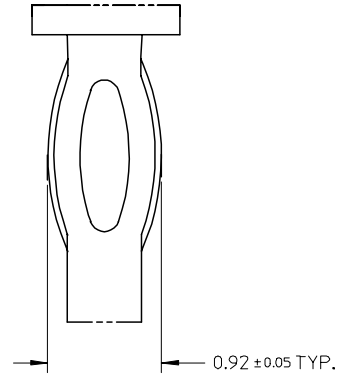
RECOMMENDED P.CBOARD HOLE PATTERN  
(SEE RECOMMENDED THICKNESS IN TABLE)



Detail 4



Detail 3



Detail 5

VOID P/N EC NO: S2007-0215 DRWN:SKANG CHKD:MLONG APPR:SKTOH	DESCRIPTION 2006/09/11 2006/09/13 2006/09/18	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
		$\nabla=0$ $\nabla C=0$	mm	INCH	DRAWN BY VSKHOANG	DATE 2004/02/10	TITLE	DDR DIMM, 1.27MM PITCH 184 CKTS, LIGHTPIPE VERTICAL PRESS-FIT				
			4 PLACES ± ---	± ---	CHECKED BY PTL IM	DATE 2004/02/10	MOLEX INCORPORATED					
			3 PLACES ± ---	± ---	APPROVED BY SKTOH	DATE 2004/02/10	MATERIAL NO.	DOCUMENT NO.	SD-87693-202			
		2 PLACES ± 0.20	± ---	SEE TABLE		SHEET NO. 4 OF 5						
		1 PLACE ± ---	± ---	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						
		ANGULAR ± 3 °		SIZE A3								

9 8 7 6 5 4 3 2 1

	10	9	8	7	6	5	4	3	2	1					
F		PLATING OPTION	PART NUMBER	TAIL LENGTH P±0.25	RECOMMENDED PCB THICKNESS	VOLTAGE KEY	DESCRIPTION	D1	D2	FINISHES CONTACT AREA	HOUSING COLOUR	LATCH			
E		TIN/LEAD	87693-4201	4.30	4.57	2.5 VOLT	LEFT	2.175	6.62	SELECTIVE GOLD 15u"/0.38uM MIN. GOLD OVER 50u"/1.27uM MIN. NICKEL	BLACK	BLACK			
	87693-4301		3.32	3.60											
	87693-4202		4.30	4.57	1.8 VOLT	CENTER	3.175	7.62							
	87693-4302		3.32	3.60											
	87693-4211		4.30	4.57	2.5 VOLT	LEFT	2.175	6.62	SELECTIVE GOLD 30u"/0.76uM MIN. GOLD OVER 50u"/1.27uM MIN. NICKEL	BLACK	CLEAR				
	87693-4311		3.32	3.60											
	87693-4212		4.30	4.57	1.8 VOLT	CENTER	3.175	7.62							
	87693-4312		3.32	3.60											
	87693-5201		4.30	4.57	2.5 VOLT	LEFT	2.175	6.62	SELECTIVE GOLD 15u"/0.38uM MIN. GOLD OVER 50u"/1.27uM MIN. NICKEL	BLACK	CLEAR				
	87693-5301		3.32	3.60											
	87693-5202		4.30	4.57	1.8 VOLT	CENTER	3.175	7.62							
	87693-5302		3.32	3.60											
	87693-5211		4.30	4.57	2.5 VOLT	LEFT	2.175	6.62	SELECTIVE GOLD 30u"/0.76uM MIN. GOLD OVER 50u"/1.27uM MIN. NICKEL	BLACK	CLEAR				
	87693-5311		3.32	3.60											
	87693-5212	4.30	4.57	1.8 VOLT	CENTER	3.175	7.62								
	87693-5312	3.32	3.60												
D		TIN	87693-6311	3.32	3.60	2.5 VOLT	LEFT	2.175	6.62	NATURAL	NATURAL				
			87693-0201	4.30	4.57	2.5 VOLT	LEFT	2.175	6.62	SELECTIVE GOLD 15u"/0.38uM MIN. GOLD OVER 50u"/1.27uM MIN. NICKEL	BLACK	BLACK			
			87693-0301	3.32	3.60										
			87693-0202	4.30	4.57	1.8 VOLT	CENTER	3.175	7.62						
			87693-0302	3.32	3.60										
			87693-0311	3.32	3.60	2.5 VOLT	LEFT	2.175	6.62	SELECTIVE GOLD 30u"/0.76uM MIN. GOLD OVER 50u"/1.27uM MIN. NICKEL	BLACK				
			87693-1201	4.30	4.57	2.5 VOLT	LEFT	2.175	6.62	SELECTIVE GOLD 15u"/0.38uM MIN. GOLD OVER 50u"/1.27uM MIN. NICKEL	BLACK	CLEAR			
			87693-1301	3.32	3.60										
			87693-1202	4.30	4.57	1.8 VOLT	CENTER	3.175	7.62						
			87693-1302	3.32	3.60										
			87693-1211	4.30	4.57	2.5 VOLT	LEFT	2.175	6.62	SELECTIVE GOLD 30u"/0.76uM MIN. GOLD OVER 50u"/1.27uM MIN. NICKEL	BLACK	CLEAR			
			87693-1311	3.32	3.60										
			87693-2311	3.32	3.60	2.5 VOLT	LEFT	2.175	6.62				NATURAL	NATURAL	

VOID P/N EC NO: S2007-0215 DRWNS:KANG CHKD:M LONG APPR:SKTOH	2006/09/11 2006/09/13 2006/09/18	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
			▽=0 ∇=0	mm INCH	MM ONLY	NTS	METRIC		
				4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.20 ± --- 1 PLACE ± --- ± ---	DRAWN BY DATE VSKHOANG 2004/02/10	TITLE			
				ANGULAR ± 3 °	CHECKED BY DATE PTL IM 2004/02/10	DDR DIMM, 1.27MM PITCH 184 CKTS, LIGHTPIPE VERTICAL PRESS-FIT			
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	APPROVED BY DATE SKTOH 2004/02/10	MOLEX INCORPORATED				
				MATERIAL NO.	DOCUMENT NO.	SHEET NO.			
				SEE TABLE	SD-87693-202	5 OF 5			
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