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Part Number: [0766931170](#)
Status: **Active**
Overview:
Description: 0.80 mm (.031") Pitch EdgeLine™ 12.5 Gbps Edge Card Connector, 170 Circuits, PCB Mating Thickness 2.36mm (.093")

Agency Certification

UL E29179

General

Product Family Edge Card Connectors
 Series 76693
 Component Type Edgecard to PCB
 Overview edgeline_high_speed_connectors
 Product Name EdgeLine™

Physical

Circuits (Loaded) 170
 Circuits Detail All Signal
 Color - Resin Black
 Durability (mating cycles max) 200
 Entry Angle Vertical
 Keying to Mating Part Yes
 Material - Metal Copper Alloy
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin High Temperature Thermoplastic
 PC Tail Length (in) 0.091 In
 PC Tail Length (mm) 2.30 mm
 PCB Locator Yes
 PCB Retention Yes
 PCB Thickness Recommended (in) 0.093 In
 PCB Thickness Recommended (mm) 2.36 mm
 Packaging Type Tray
 Pitch - Mating Interface (in) 0.031 In
 Pitch - Mating Interface (mm) 0.80 mm
 Pitch - Term. Interface (in) 0.031 In
 Pitch - Term. Interface (mm) 0.80 mm
 Plating min: Mating (µin) 30
 Plating min: Mating (µm) 0.76
 Plating min: Termination (µin) 30
 Plating min: Termination (µm) 0.76
 Temperature Range - Operating -40°C to +85°C
 Termination Interface: Style N/A

Electrical

Current - Maximum per Contact 1.5A
 Voltage - Maximum 250V AC

Material Info

Reference - Drawing Numbers

Packaging Specification PK-76693-900
 Product Specification PS-75594-999
 Sales Drawing SD-76693-100, SD-76693-103

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.

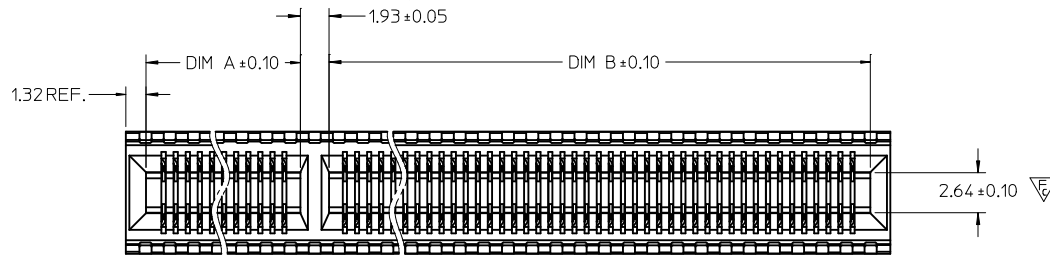
Search Parts in this Series

76693Series

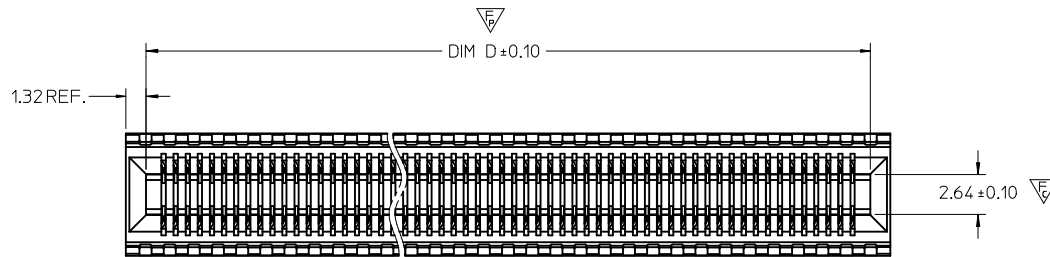
This document was generated on 06/04/2010

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PART NUMBER	VERSION	BAY 1/BAY 2	TOTAL CIRCUITS	DIM A	DIM B	DIM C	DIM D	MAX DIFF. PAIRS	STATUS
76693-2278	2 BAY	132/146	278	54.23	59.83	118.63	-----	92	TOOLED
76693-1200	1 BAY	200	200	-----	-----	84.20	81.55	66	TOOLED
76693-1170	1 BAY	170	170	-----	-----	72.20	69.55	56	TOOLED
76693-2214	2 BAY	20/194	214	9.43	79.03	93.03	-----	70	-----
76693-2274*	2 BAY	172/122	294	70.22	50.23	125.03	-----	96	TOOLED
76693-3170	1 BAY	170	170	-----	-----	72.20	69.55	58	TOOLED
76693-2294	2 BAY	172/122	294	70.22	50.23	125.03	-----	96	TOOLED



2 BAY HSEC

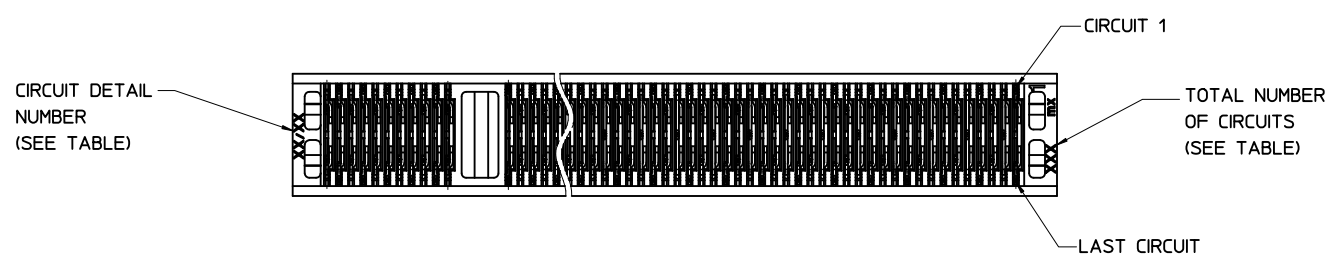
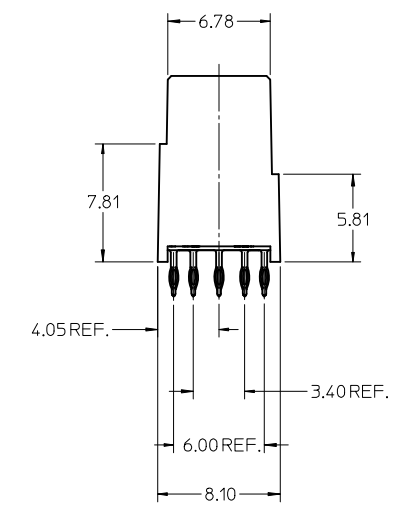
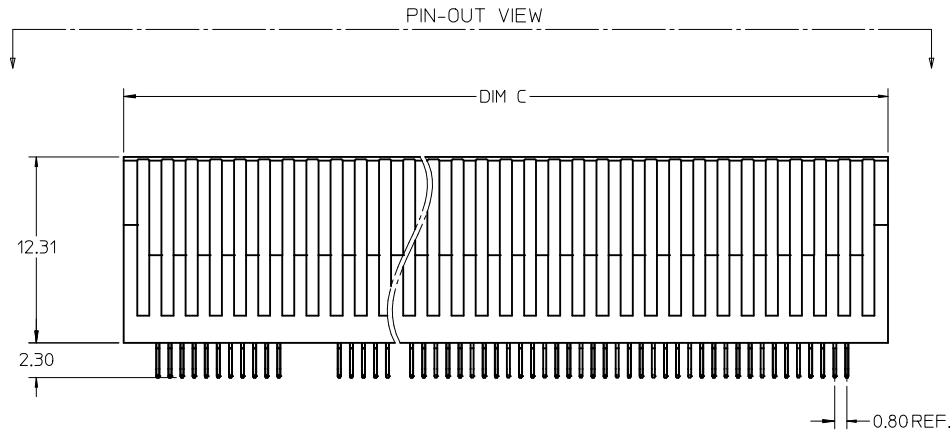


1 BAY HSEC

NOTES:

- MATERIAL:
HOUSING - GLASS FILLED THERMOPLASTIC, 94-V0, BLACK
TERMINALS - COPPER ALLOY
- FINISH:
CONTACT AREA: HARD GOLD -0.76µm MIN OVER 3.80µ NICKEL
COMPLIANT AREA: TIN - 0.76/1.52µm OVER NICKEL
* SPECIAL FINISH:
CONTACT AREA: HARD GOLD -1.27µm MIN OVER 3.80µ NICKEL
COMPLIANT AREA: TIN - 0.76/1.52µm OVER NICKEL
- REFER TO PS-75594-999 PRODUCT SPECIFICATION FOR ALL ELECTRICAL, MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS.
- REFER TO PK-76693-900 FOR ALL PACKAGING SPECIFICATIONS.
- PROCESSING: PRESSFIT TO PC BOARD.
- MATING PC BOARD THICKNESS = 2.36±0.16MM OVER CONTACT PADS.
- PRODUCT IS ELV AND RoHS COMPLIANT. LEVEL OF COMPLIANCE: 6/6
ALL BANNED SUBSTANCES ARE REMOVED:
Pb (LEAD)
HEXAVALENT CHROMIUM (CrVI)
CADMIUM
MERCURY
POLYBROMINATED BIPHENYL (PBB)
POLYBROMINATED DIPHENYL ETHER (PBDE)
- THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPEC PS-45499-002

ADDED 76693-2294 P/N EC NO: UCP2010-2476 DRWING: DROSCA 2010/03/26 CHKD: JCOMERC I 07/21/08 APPR: JCOMERC I 2010/03/29	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	▽ = 0	mm	INCH	DRAWN BY DROSCA	DATE 07/21/08	TITLE EDGE LINE 12.5GB 0.093*PCB/0.8MM PITCH EDGE CARD CONNECTOR MOLEX INCORPORATED DOCUMENT NO. SD-76693-100 SHEET NO. 1 OF 6		
	▽ = 2	4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	CHECKED BY JCOMERC I	DATE 07/21/08			
	▽ = 1	2 PLACES ± 0.13 ± ---	1 PLACE ± 0.25 ± ---	APPROVED BY JCOMERC I	DATE 07/21/08			
		ANGULAR ±1/2°		MATERIAL NO. SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

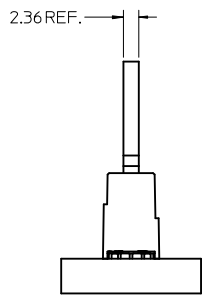
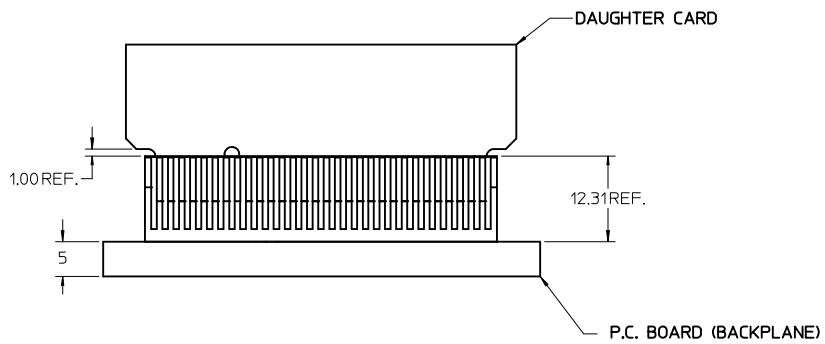
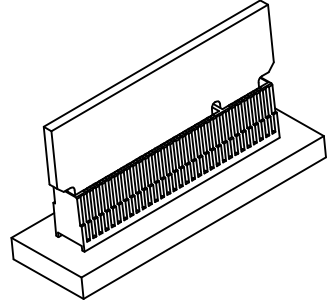
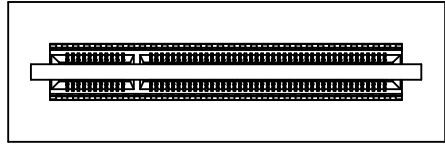


SEE SHEET 1 EC NO: UCP2010-2476 DRW: DROSCA 2010/03/26 CHKD: JCOMERC I 07/21/08 APPR: JCOMERC I 2010/03/29	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		4 PLACES ± --- ± ---	DRAWN BY DROSCA	DATE 07/21/08	TITLE EDGE LINE 12.5GB 0.093"PCB/0.8MM PITCH EDGE CARD CONNECTOR		
		3 PLACES ± --- ± ---	CHECKED BY JCOMERC I	DATE 07/21/08	MOLEX INCORPORATED		
		2 PLACES ± 0.13 ± ---	APPROVED BY JCOMERC I	DATE 07/21/08	MATERIAL NO. SEE SHEET 1		
1 PLACE ± 0.25 ± ---	ANGULAR ± 1/2°	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DOCUMENT NO. SD-76693-100	SHEET NO. 2 OF 6		
A3	REV	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

P.C. BOARD MOUNTING

13 12 11 10 9 8 7 6 5 4 3 2 1

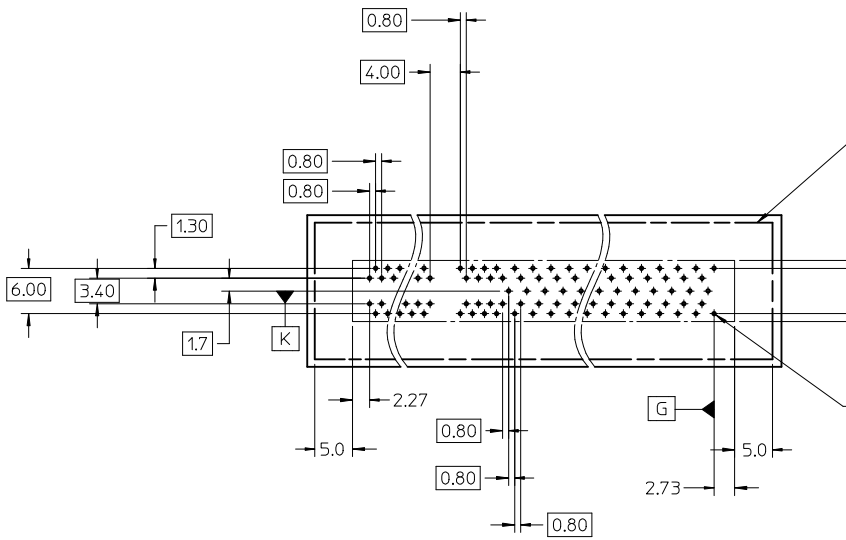
J I H G F E D C B A



SEE SHEET 1 EC NO: UCP2010-2476 DRW: DROSCA 2010/03/26 CHKD: JCOMERCI 07/21/08 APPR: JCOMERCI 2010/03/29	DESCRIPTION A3	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1" style="width: 100%; border-collapse: collapse;"> <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>± 0.13</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.25</td> <td>± ---</td> </tr> <tr> <td colspan="3" style="text-align: center;">ANGULAR ± 1/2°</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.13	± ---	1 PLACE	± 0.25	± ---	ANGULAR ± 1/2°			DIMENSION STYLE MM ONLY	SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		mm	INCH																						
	4 PLACES	± ---	± ---																						
	3 PLACES	± ---	± ---																						
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1 PLACE	± 0.25	± ---																							
ANGULAR ± 1/2°																									
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			DRAWN BY DROSCA	DATE 07/21/08	TITLE EDGE LINE 12.5GB 0.093"PCB/0.8MM PITCH EDGE CARD CONNECTOR																				
			CHECKED BY JCOMERCI	DATE 07/21/08																					
			APPROVED BY JCOMERCI	DATE 07/21/08	MOLEX INCORPORATED																				
			MATERIAL NO. SEE SHEET 1	DOCUMENT NO. SD-76693-100				SHEET NO. 3 OF 6																	
			THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																						

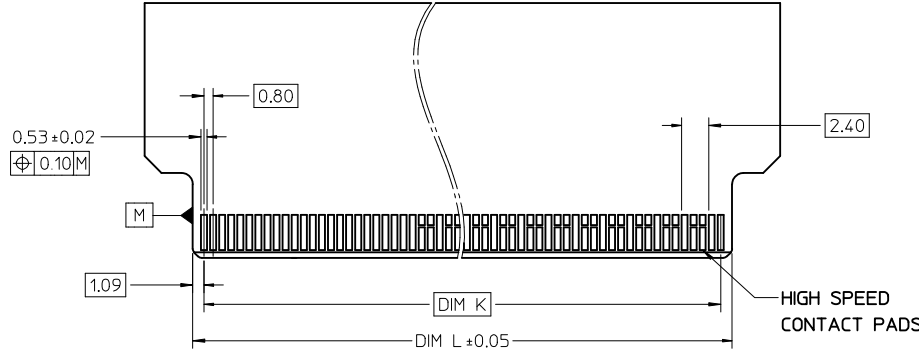
12 11 10 9 8 7 6 5 4 3 2 1

PART NUMBER	VERSION	DIM E	DIM F	DIM G	DIM H	DIM K	DIM L
76693-2278	2 BAY	52.00	57.60	53.90	59.50	-----	-----
76693-1200	1 BAY	-----	-----	-----	-----	79.20	81.38
76693-1170	1 BAY	-----	-----	-----	-----	67.20	69.38
76693-2214	2 BAY	7.20	76.80	9.10	78.70	-----	-----
76693-2294	2 BAY	55.20	60.80	57.10	62.70	-----	-----

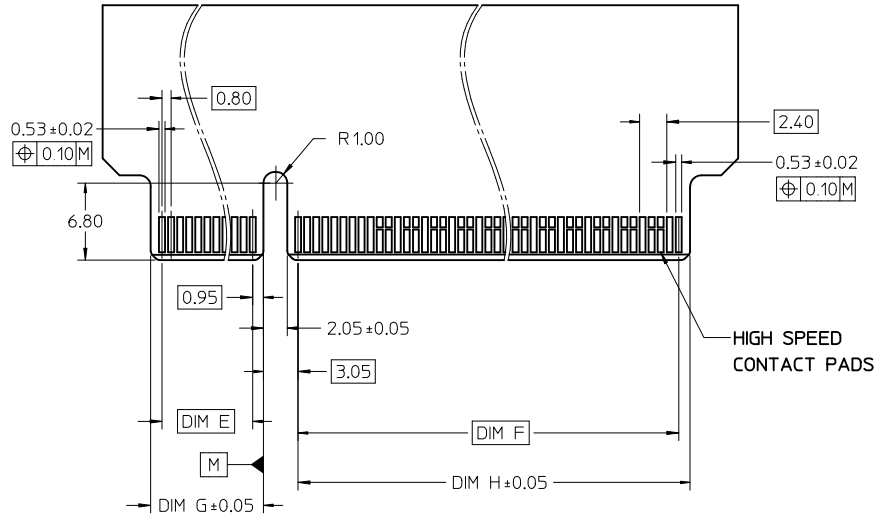


GENERAL PCB LAYOUT
(YOUR CONFIGURATION MAY VARY)

FINISHED PLATED THRU HOLE SIZE
 $\phi 0.57\text{MM}$ REF. DRILLED HOLE SIZE
 0.0254-0.0635 ELECTRO DEPOSITED COPPER



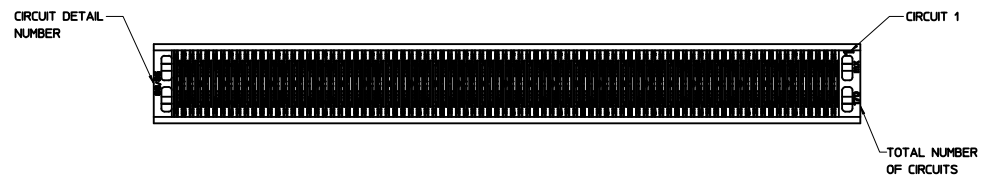
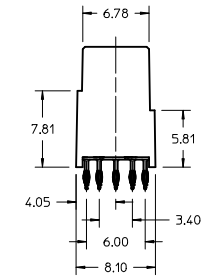
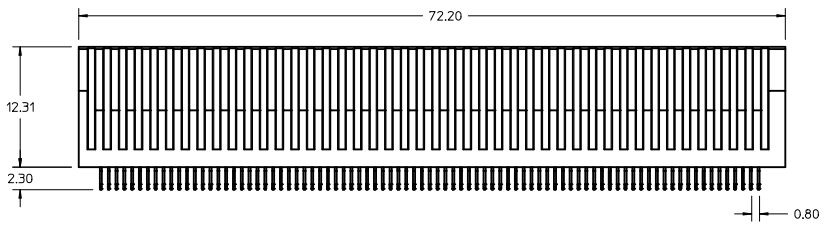
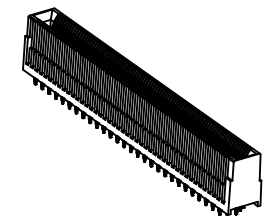
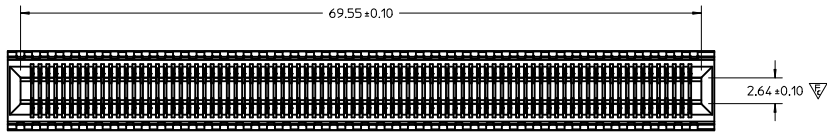
DAUGHTER CARD



DAUGHTER CARD

SEE SHEET 1 EC NO: UCP2010-2476 DRWN: DROSCA 2010/03/26 CHKD: JCOMERC I 07/21/08 APPR: JCOMERC I 2010/03/29	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	2 PLACES ± 0.13 ± ---	1 PLACE ± 0.25 ± ---	DRAWN BY DROSCA	DATE 07/21/08	EDGE LINE 12.5GB 0.093"PCB/0.8MM PITCH EDGE CARD CONNECTOR			
		ANGULAR ± 1/2°				CHECKED BY JCOMERC I	DATE 07/21/08	MOLEX INCORPORATED			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				APPROVED BY JCOMERC I	DATE 07/21/08	MATERIAL NO. SEE SHEET 1	DOCUMENT NO. SD-76693-100	SHEET NO. 4 OF 6	

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

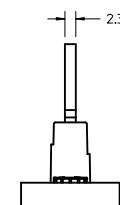
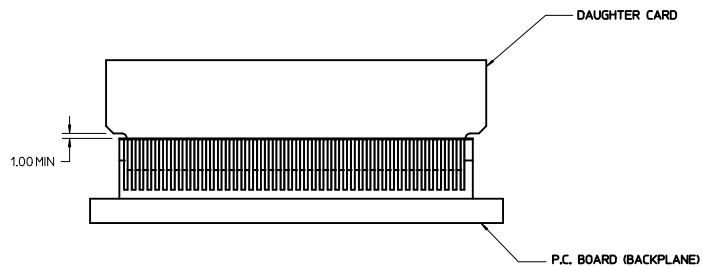


- NOTES:**
- MATERIAL:**
HOUSING - GLASS FILLED THERMOPLASTIC, 94-V0, BLACK
TERMINALS - COPPER ALLOY
 - FINISH:**
TERMINALS - 0.76 MICRONS MINIMUM GOLD IN THE CONTACT AREA AND 0.76 - 1.52 MICRONS TIN IN PRESSFIT TAIL AREA OVER 1.27 MICRONS MINIMUM NICKEL OVERALL.
 - REFER TO PS-76421-001 PRODUCT SPECIFICATION FOR ALL ELECTRICAL, MECHANICAL AND ENVIRONMENTAL SPECIFICATIONS.
 - REFER TO PK-75594-999 FOR ALL PACKAGING SPECIFICATIONS.
 - PROCESSING: PRESSFIT TO PC BOARD.
 - MATING PC BOARD THICKNESS = 2.36±0.16MM OVER CONTACT PADS.
 - PRODUCT IS ELV AND RoHS COMPLIANT. LEVEL OF COMPLIANCE: 6/6
ALL BANNED SUBSTANCES ARE REMOVED:
Pb (LEAD)
HEXAVALENT CHROMIUM (CrVI)
CADMIUM
MERCURY
POLYBROMINATED BIPHENYL (PBB)
POLYBROMINATED DIPHENYL ETHER (PBDE)

INITIAL RELEASE EC NO: UCP2010-1367 DRAWN BY: DROSCA CHKD: JCOMERCI APPR: JCOMERCI REV: 1	2009/12/03 2009/12/03 2009/12/03	QUALITY SYMBOLS ∇ = 0 ∇ = 1 ∇ = 1	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.13 ± --- 1 PLACE ± 0.25 ± --- ANGULAR ± 1/2°	DIMENSION STYLE MM ONLY	SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
	DRAWN BY: DROSCA CHECKED BY: JCOMERCI APPROVED BY: JCOMERCI	DATE: 12/01/2009 DATE: 12/01/2009 DATE: 2009/12/03	TITLE EDGE LINE 12.5GB 0.093"PCB/0.8MM PITCH 170 CIRCUITS	MATERIAL NO. 76693-3170	DOCUMENT NO. SD-76693-103	SHEET NO. 1 OF 5	MOLEX INCORPORATED
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS						
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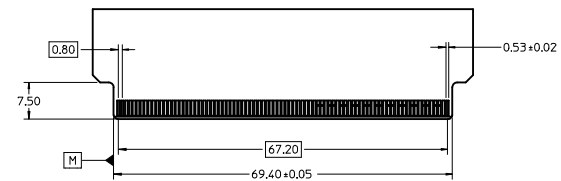
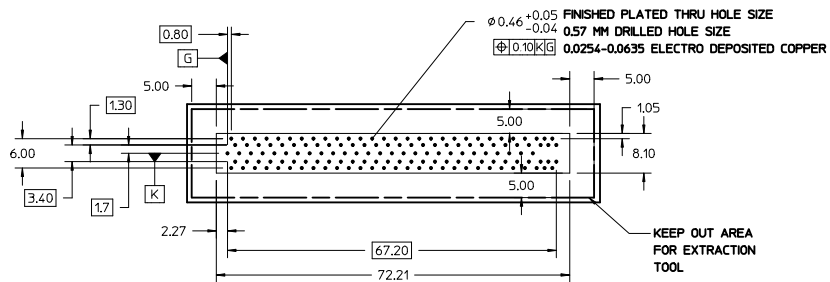
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P.C. BOARD MOUNTING

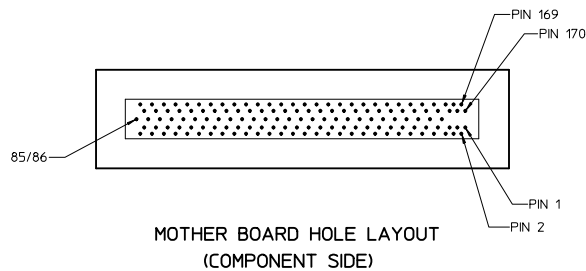


SEE SHEET 1 IEC NO.: UCP2010-1367 DRAWN BY: DROSCA 2009/12/03 CHYK: 2009/12/03 APPR: JCOMERCI 2009/12/03	1	REV	DESCRIPTION	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.13 ± --- 1 PLACE ± 0.25 ± --- ANGULAR ± 1/2°	DIMENSION STYLE MM ONLY	SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: DROSCA DATE: 12/01/2009 CHECKED BY: JCOMERCI DATE: 12/01/2009 APPROVED BY: JCOMERCI DATE: 2009/12/03	TITLE EDGE LINE 12.5GB 0.093"PCB/0.8MM PITCH 170 CIRCUITS				
				MATERIAL NO.: SEE SHEET 1 SIZE: D	DOCUMENT NO. SD-76693-103					SHEET NO. 2 OF 5
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

19 18 17 16 15 14 13 12 11 10 9 8 7 6 5 4 3 2 1

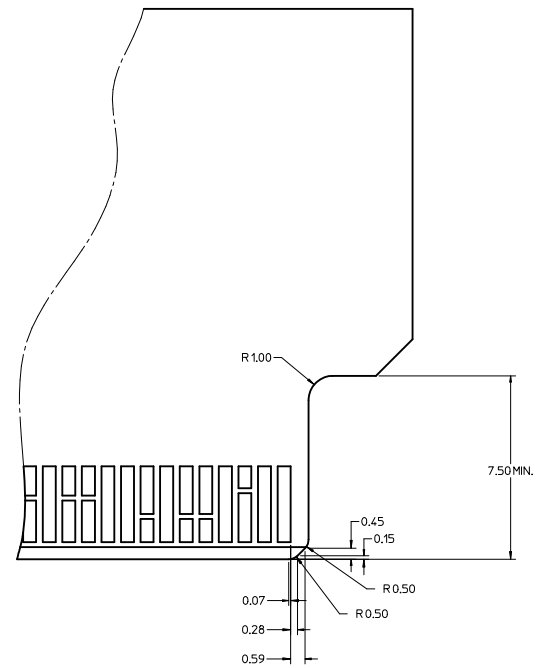
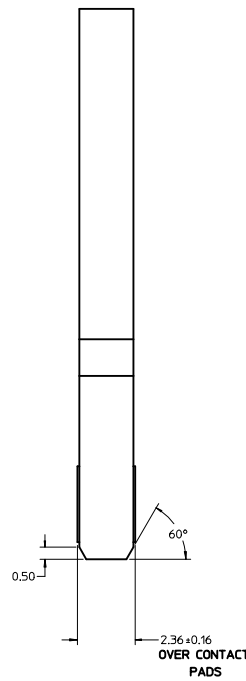
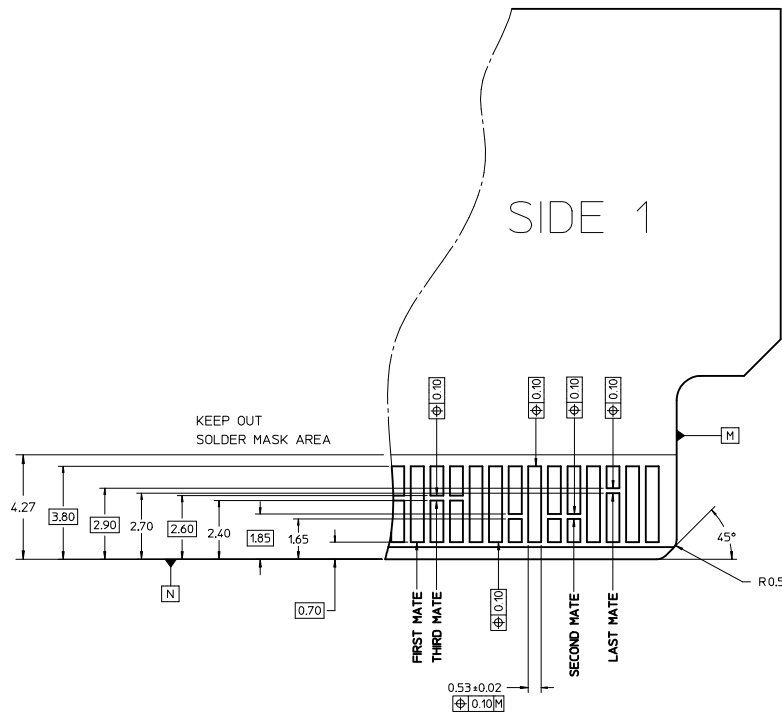


DAUGHTER CARD



SEE SHEET 1 IEC NO: UCP2010-1367 DRAWN: DROSCA 2009/12/03 CHYK: 2009/12/03 APPR: JCOMERCI 2009/12/03	QUALITY SYMBOLS $\nabla=0$ $\nabla=0$	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 2:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.13 ± --- 1 PLACE ± 0.25 ± --- ANGULAR ± 1/2°	mm INCH ± --- ± --- ± 0.13 ± --- ± 0.25 ± --- ± 1/2°	DRAWN BY DROSCA 12/01/2009 CHECKED BY JCOMERCI 12/01/2009 APPROVED BY JCOMERCI 2009/12/03	DATE DATE DATE	TITLE EDGE LINE 12.5GB 0.093"PCB/0.8MM PITCH 170 CIRCUITS	MATERIAL NO. SEE SHEET 1
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					

MODULE EDGE CARD CONTACT DETAIL



Note:

These are generic details that describe the configuration of various PCB design elements. The customer must determine where and when to use each element to accommodate their specific application.

SEE SHEET 1 IEC NO.: UCF2010-1367 DRAWN BY: DROSCA CHYK: 2009/12/03 APPR.: JCOMERCI 2009/12/03	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 10:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		4 PLACES ±--- ±--- 3 PLACES ±--- ±--- 2 PLACES ±0.13 ±--- 1 PLACE ±0.25 ±--- ANGULAR ±1/2°	mm INCH	DRAWN BY: DROSCA DATE: 12/01/2009 CHECKED BY: JCOMERCI DATE: 12/01/2009 APPROVED BY: JCOMERCI DATE: 2009/12/03	TITLE EDGE LINE 12.5GB 0.093"PCB/0.8MM PITCH 170 CIRCUITS	MATERIAL NO.: SEE SHEET 1	DOCUMENT NO.: SD-76693-103
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS							
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76693-170 170 CIRCUITS				
COMPONENT SIDE 1		ALLEGRO PIN NO.	COMPONENT SIDE 2	
PIN NO.	SIGNAL		SIGNAL	PIN NO.
170				1
169				2
168				3
167				4
166				5
165				6
164				7
163				8
162				9
161				10
160				11
159				12
158				13
157				14
156				15
155				16
154				17
153				18
152				19
151				20
150				21
149				22
148				23
147				24
146				25
145				26
144				27
143				28
142				29
141				30
140				31
139				32
138				33
137				34
136				35
135				36
134				37
133				38
132				39
131				40
130				41
129				42
128				43
127				44
126				45
125				46
124				47
123				48
122				49
121				50
120				51
119				52
118				53
117				54
116				55
115				56
114				57
113				58
112				59
111				60
110				61
109				62
108				63
107				64
106				65
105				66
104				67
103				68
102				69
101				70
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87				84
86				85

SEE SHEET 1 IEC NO.: UCP2010-1367 DRAWN BY: DROSCHA CHYK: 2009/12/03 APPR.: JCOMERCI 2009/12/03	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 4:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION
		4 PLACES ± mm ± INCH	3 PLACES ± --- ± ---	DRAWN BY: DROSCHA DATE: 12/01/2009	TITLE EDGE LINE 12.5GB 0.093"PCB/0.8MM PITCH 170 CIRCUITS		
		2 PLACES ± 0.13 ± ---	1 PLACE ± 0.25 ± ---	CHECKED BY: JCOMERCI DATE: 12/01/2009	MOLEX INCORPORATED		
		ANGULAR ±1/2°		APPROVED BY: JCOMERCI DATE: 2009/12/03	MATERIAL NO.:	DOCUMENT NO.:	SHEET NO.:
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE SHEET 1		SD-76693-103			5 OF 5
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION							