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ELECTRONICS

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Jameco Part Number 803479

PRODUCT SPECIFICATION

2MM DUAL ROW OR SINGLE ROW (SMT/ VERTICAL/ RIGHT ANGLE) HEADER

1.0 SCOPE

This specification covers the performance requirements for 2mm Dual Row or Single Row Header (SMT/ Vertical/ Right Angle)

2.0 PRODUCT DESCRIPTION

2.1 Product covered by this specification is for series number 87752, 87753, 87754 87755, 87756, 87757, 87758, 87759, 87760, 87761, 87762, 87763, 87830 and 87239.

2.2 For dimensions, materials & plating, refer to the appropriate product drawings.

3.0 APPLICABLE DOCUMENTS AND SPECIFICATIONS

The following documents are part of this specification to the extent specified herewith. In the event of conflict between the requirements of this specification and the product drawing, the product drawing shall take precedence. In the event of conflict between the requirements of this specification and reference documents, this specification shall take the precedence.

MIL-STD-202 Test Methods for Electrical and Electronic Component Parts.

MIL-STD-1344 Test methods of Electrical Connector

4.0 RATINGS

4.1 Voltage : 125V

4.2 Current : 2.00 Amp

4.3 Operating Temperature : -55°C to + 105°C Current

TENTATIVE RELEASE : THIS SPECIFICATION IS BASED ON DESIGN OBJECTIVES AND IS STRICTLY TENTATIVE. PRELIMINARY DATA MAY EXIST, BUT THIS SPECIFICATION IS SUBJECT TO CHANGE BASED ON THE RESULTS OF ADDITIONAL TESTING AND EVALUATION

REVISION:	ECR/ECN INFORMATION:	TITLE:	SHEET No.	
B1	EC No: S2004-0868 DATE: 2004/07/20	2MM DUAL ROW OR SINGLE ROW (SMT/ VERTICAL/ RIGHT ANGLE) HEADER	1 of 3	
DOCUMENT NUMBER:		CREATED / REVISED BY:	CHECKED BY:	APPROVED BY:
PS-87761-100		AI TING	KCLING	SKTOH



PRODUCT SPECIFICATION

5.0 PERFORMANCE

5.1 ELECTRICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
1	Capacitance	Measure between adjacent terminals	1.2 pf max
2	Insulation Resistance	Test between adjacent contact at 500 V DC for 1 minute, per (MIL-STD-1344 MTD 3001.1)	1000 Megaohms minimum
3	Dielectric Strength	Test between adjacent contact at 500VAC rms and 1 minute hold time.	No breakdown

5.2 MECHANICAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
4	Pin Retention Force in Housing	Push pin axially from housing at a rate of 12.7mm/min (0.50 inch/min)	0.85 Kgf min

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PRODUCT SPECIFICATION

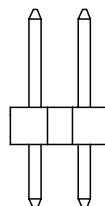
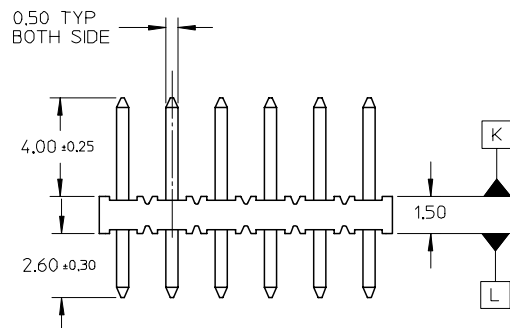
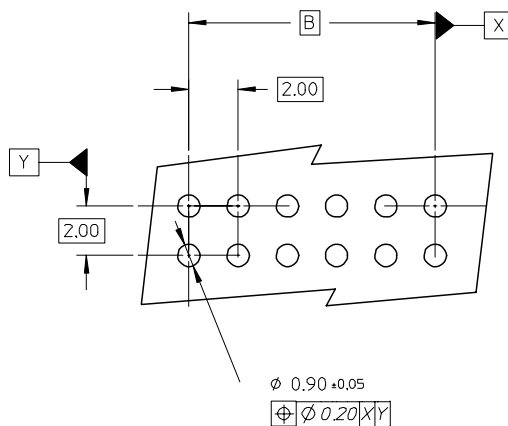
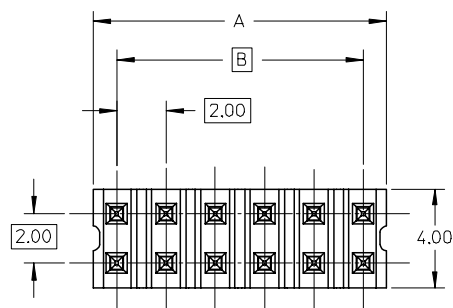
5.3 ENVIRONMENTAL REQUIREMENTS

ITEM	DESCRIPTION	TEST CONDITION	REQUIREMENT
5	Temperature Rise	Apply 2 amps DC to the header and measure contact temperature rise for 48 hours	30°C maximum temperature rise above ambient.
6	Solderability	Solder Time: 5 ± 0.5 sec. Solder Temperature: 245 ±5 °C	Soldertail should have 95% continuous new solder coating coverage (Apply to non-kinked Soldertail only)
7	Resistance to Soldering Heat (Wave Soldering) For Series a)87760, b)87758, 87830, 87761 c) Other series	Sample mounted on PCB and subject to wave soldering, a)Temperature : 260 ±5 °C for 12 ± 2 Sec b)Temperature : 245 ±5 °C for 3Sec c) Temperature : 245 ±5 °C for 5Sec	Appearance : No Damage
8	Resistance to Solder Heat (Reflow) For Series 87759, 87762	Sample mounted on PCB and subject to reflow, Temperature : 245 ±5 °C for 10 ±2 Sec	Appearance : No Damage

6.0 Packaging

Product shall be packaged and protected against damage during handling, transportation and storage.

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LEGEND
87758- * * * *
CKT SIZE (SEE SHT 2 TABLE) PLATING (SEE NOTE 2)

NOTES:

1. MATERIAL:

HOUSING: 30% G.F. NYLON 46, 94V-0, COLOR: BLACK
PIN: 0.50mm SQ. PHOSPHOR BRONZE 510

2. PLATING:

**16 - 0.38um MIN GOLD IN CONTACT AREA.
TIN IN SOLDER AREA, BOTH OVER
NICKEL OVERALL.
**17 - 0.76um MIN GOLD IN CONTACT AREA.
TIN IN SOLDER AREA, BOTH OVER
NICKEL OVERALL.
**18 - 2.54um MIN TIN OVER
NICKEL OVERALL.

3. 12 CKT USED FOR ILLUSTRATION ONLY

4. PACKED IN POCKET TRAY

5. PIN PUSHOUT FORCE: 1KG MIN IN EITHER DIRECTION

6. CKT 4 AND 6 IS CUT FROM CKT 8 AND 12 RESPECTIVELY.
CKT 2 ARE CUT FROM ANY LARGER CKT SIZE.ROUGH EDGES
ARE EXPECTED ALONG THE CUTTING EDGES.

7. PRODUCT SPEC PS-87761-100 APPLIES.

8. RECOMMENDED PCB THICKNESS IS 1.60±0.10

Ø 0.71±0.07
Ø 0.30 M K



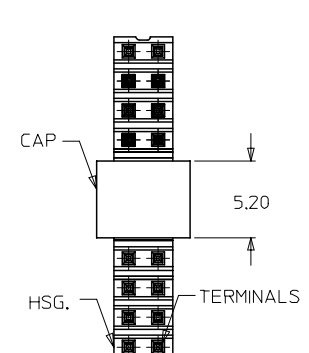
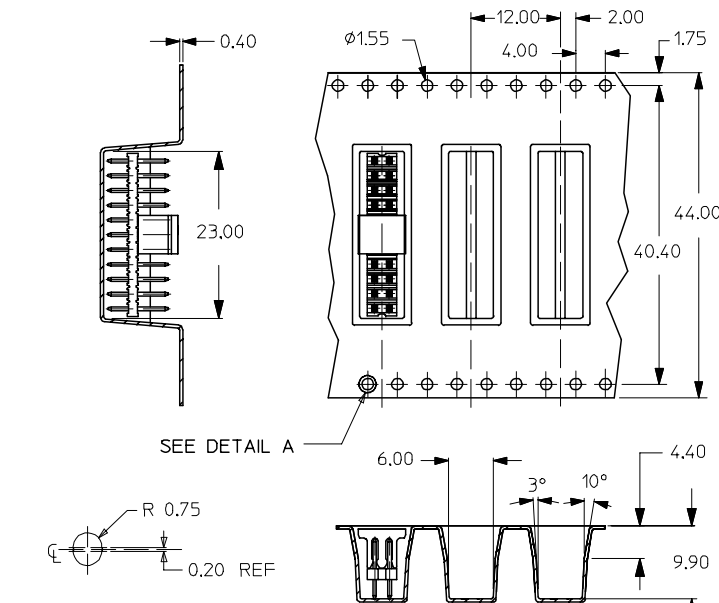
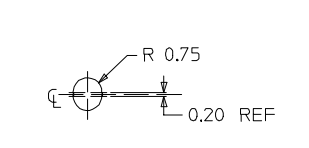
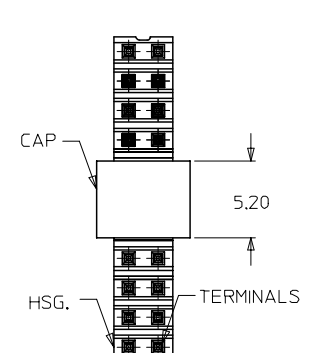
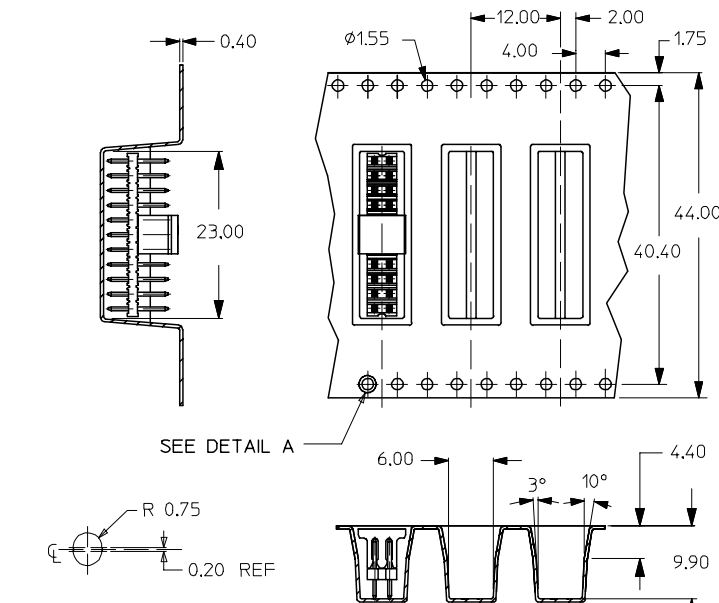
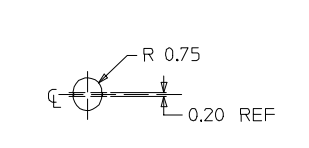
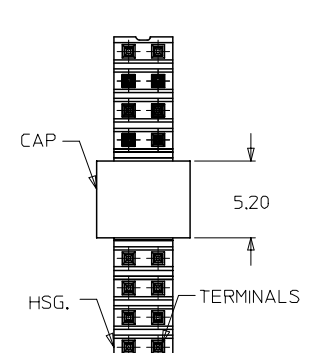
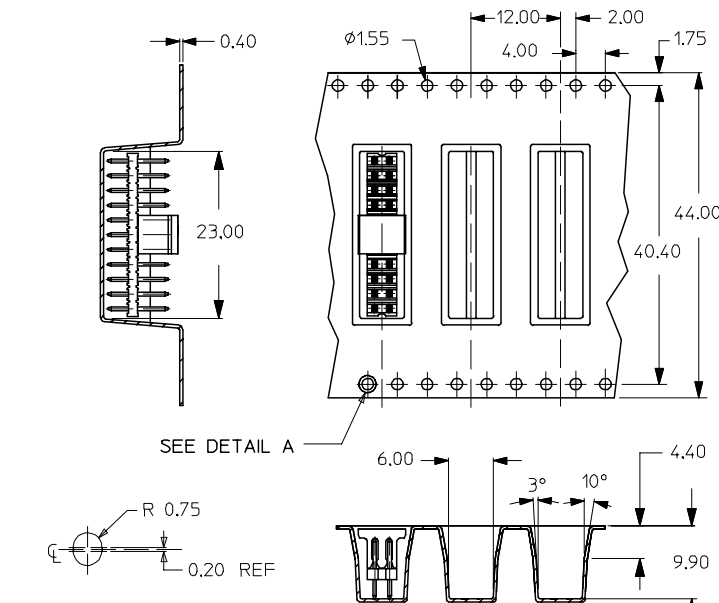
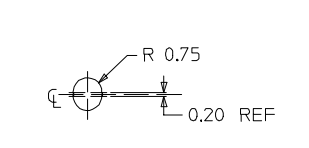
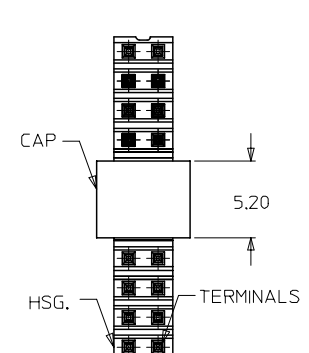
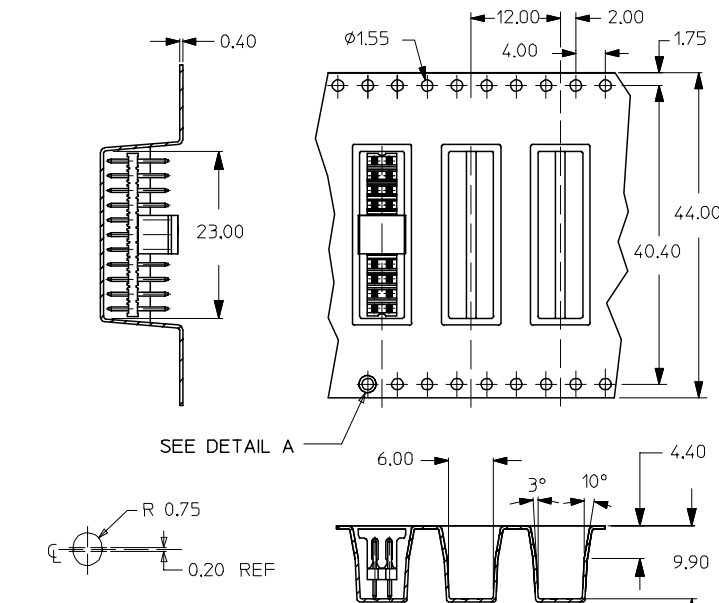
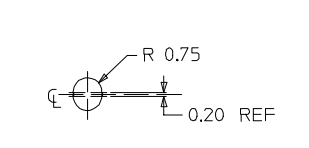
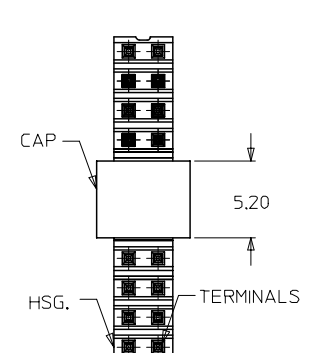
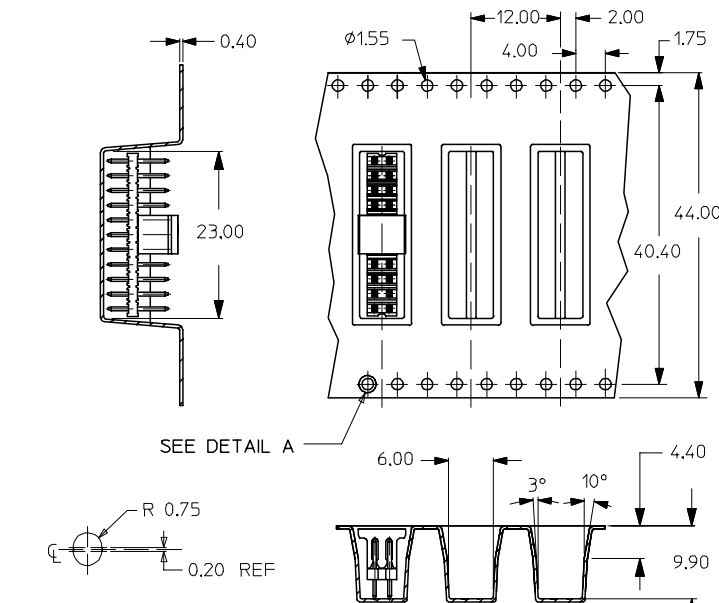
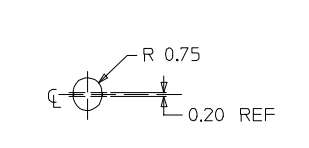
VIEW P

Ø 0.71±0.07
Ø 0.30 M L



VIEW Q

EC NO: S2005-0715 DRAWN:KCHO CHKD:PTLM APPR:SCLOW 2005/05/16 2005/05/18 2005/05/19		DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	 THIRD ANGLE PROJECTION
			▽=0			DRAWN BY	DATE	TITLE SALES DRAWING 2MM DUAL ROW SINGLE WAFER, VERTICAL T/H HDR		
			▽C=0	4 PLACES	± --- ± ---	KSEE	2003/10/30			
				3 PLACES	± --- ± ---	CHECKED BY	DATE			
				2 PLACES	± 0.20 ± ---	KCL ING	2004/01/05			
A2		REV		1 PLACE	± --- ± ---	APPROVED BY	DATE	 MOLEX INCORPORATED		
			ANGULAR ± 3 °		SKTOH	2004/01/05				
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-87758-107			SHEET NO. 1 OF 2
SIZE A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION										

	10	9	8	7	6	5	4	3	2	1																																															
F	PART NUMBER	CKT SIZE	A	B	<table><tr><td>CKT SIZE</td><td>PART NO. WITH CAP IN TUBE</td><td>PART NO. WITH CAP IN TAPE/REEL</td><td>PLATING TYPE</td></tr><tr><td>8</td><td>87758-0814</td><td>87758-0815</td><td>**16</td></tr><tr><td>22</td><td>87758-5126</td><td>87758-5111</td><td>MOLEX INC.</td></tr></table>						CKT SIZE	PART NO. WITH CAP IN TUBE	PART NO. WITH CAP IN TAPE/REEL	PLATING TYPE	8	87758-0814	87758-0815	**16	22	87758-5126	87758-5111	MOLEX INC.																																			
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	22	87758-5126	87758-5111	MOLEX INC.																																																					
	87758-02** 	2	NA	NA	WITH CAP IN TUBE (22 CKT SHOWN FOR MOLEX INC.)  WITH CAP IN TAPE/REEL (22 CKT SHOWN FOR MOLEX INC.)  DETAIL A 																																																				
87758-04** 	4	NA	2.00																																																						
87758-06** 	6	NA	4.00																																																						
87758-08**	8	7.90	6.00																																																						
E	87758-10**	10	9.90	8.00	WITH CAP IN TUBE (22 CKT SHOWN FOR MOLEX INC.)  WITH CAP IN TAPE/REEL (22 CKT SHOWN FOR MOLEX INC.)  DETAIL A 																																																				
	87758-12**	12	11.90	10.00																																																					
	87758-14**	14	13.90	12.00																																																					
	87758-16**	16	15.90	14.00																																																					
	87758-18**	18	17.90	16.00																																																					
D	87758-20**	20	19.90	18.00	WITH CAP IN TUBE (22 CKT SHOWN FOR MOLEX INC.)  WITH CAP IN TAPE/REEL (22 CKT SHOWN FOR MOLEX INC.)  DETAIL A 																																																				
	87758-22**	22	21.90	20.00																																																					
	87758-24**	24	23.90	22.00																																																					
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C	87758-30**	30	29.90	28.00	WITH CAP IN TUBE (22 CKT SHOWN FOR MOLEX INC.)  WITH CAP IN TAPE/REEL (22 CKT SHOWN FOR MOLEX INC.)  DETAIL A 																																																				
	87758-32**	32	31.90	30.00																																																					
	87758-34**	34	33.90	32.00																																																					
	87758-36**	36	35.90	34.00																																																					
	87758-38**	38	37.90	36.00																																																					
B	87758-40**	40	39.90	38.00	WITH CAP IN TUBE (22 CKT SHOWN FOR MOLEX INC.)  WITH CAP IN TAPE/REEL (22 CKT SHOWN FOR MOLEX INC.)  DETAIL A 																																																				
	87758-42**	42	41.90	40.00																																																					
	87758-44**	44	43.90	42.00																																																					
	87758-46**	46	45.90	44.00																																																					
	87758-48**	48	47.90	46.00																																																					
A	87758-50**	50	49.90	48.00	<table><tr><td rowspan="4">EC NO: S2005-0715 DRM:KCHO CHKD:PTLM APPR:SCLOW A2</td><td rowspan="4">REV</td><td rowspan="4">DESCRIPTION</td><td rowspan="4">QUALITY SYMBOLS ▽=0 ▽=0</td><td colspan="2">GENERAL TOLERANCES (UNLESS SPECIFIED)</td><td colspan="2">DIMENSION STYLE MM ONLY</td><td>SCALE NTS</td><td>DESIGN UNITS METRIC</td><td>THIRD ANGLE PROJECTION</td></tr><tr><td rowspan="3">4 PLACES</td><td>mm</td><td>INCH</td><td>DRAWN BY KSEE</td><td>DATE 2003/10/30</td><td rowspan="3">TITLE SALES DRAWING 2MM DUAL ROW SINGLE WAFER, VERTICAL T/H HDR MOLEX INCORPORATED</td></tr><tr><td>3 PLACES</td><td>± ---</td><td>± ---</td><td>CHECKED BY KCL ING</td><td>DATE 2004/01/05</td></tr><tr><td>2 PLACES</td><td>± 0.20</td><td>± ---</td><td>APPROVED BY SKTOH</td><td>DATE 2004/01/05</td></tr><tr><td colspan="2">1 PLACE</td><td>± ---</td><td>± ---</td><td colspan="2">ANGULAR ± 3 °</td><td>MATERIAL NO. SEE TABLE</td><td>DOCUMENT NO. SD-87758-107</td><td>SHEET NO. 2 OF 2</td></tr><tr><td colspan="4">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td><td colspan="7">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</td></tr></table>						EC NO: S2005-0715 DRM:KCHO CHKD:PTLM APPR:SCLOW A2	REV	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	4 PLACES	mm	INCH	DRAWN BY KSEE	DATE 2003/10/30	TITLE SALES DRAWING 2MM DUAL ROW SINGLE WAFER, VERTICAL T/H HDR MOLEX INCORPORATED	3 PLACES	± ---	± ---	CHECKED BY KCL ING	DATE 2004/01/05	2 PLACES	± 0.20	± ---	APPROVED BY SKTOH	DATE 2004/01/05	1 PLACE		± ---	± ---	ANGULAR ± 3 °		MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87758-107	SHEET NO. 2 OF 2	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						
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