

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0878980455

Status:

Active

Overview:

kk

Description:

2.54mm (.100") Pitch KK® Header, Surface Mount, Breakaway, Vertical, 4 Circuits, 0.38µm (15µ") Gold (Au) Plating, Embossed Tape on Reel Packaging, with Cap, Lead-free

Documents:

Drawing (PDF)

RoHS Certificate of Compliance (PDF)

General

Product Family

PCB Headers

Series

87898

Application

Board-to-Board, Wire-to-Board

Overview

kk

Product Name

KK®

Physical

Breakaway

Yes

Circuits (Loaded)

4

Circuits (maximum)

4

Color - Resin

Black

First Mate / Last Break

No

Glow-Wire Compliant

No

Guide to Mating Part

No

Keying to Mating Part

None

Lock to Mating Part

None

Material - Metal

Copper Alloy

Material - Plating Mating

Gold

Material - Plating Termination

Tin

Material - Resin

Nylon

Number of Rows

1

Orientation

Vertical

PCB Locator

No

PCB Retention

None

Packaging Type

Embossed Tape on Reel

Pitch - Mating Interface (in)

0.100 In

Pitch - Mating Interface (mm)

2.54 mm

Pitch - Term. Interface (in)

0.100 In

Pitch - Term. Interface (mm)

2.54 mm

Polarized to Mating Part

No

Polarized to PCB

No

Robotic Placement

Pick and Place Cap

Shrouded

No

Stackable

No

Temperature Range - Operating

-55°C to +105°C

Termination Interface: Style

Surface Mount

Electrical

Current - Maximum per Contact

3A

Voltage - Maximum

250V

Material Info

Reference - Drawing Numbers

Packaging Specification

PK-89990-486

Sales Drawing

SD-87898-001

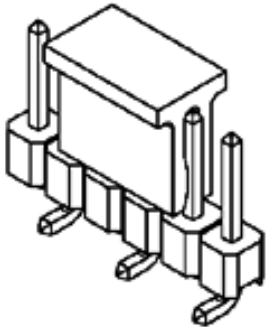


image - Reference only

Series

EU RoHS

ELV and RoHS

Compliant

REACH SVHC

Not Reviewed

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

87898Series

Mates With

KK® PCB Receptacles 4455. SL™ IDT Housings 70430 , 7720, 70400. C-Grid® PCB Receptacles 90147, 90148

This document was generated on 05/25/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

10 9 8 7 6 5 4 3 2 1

F

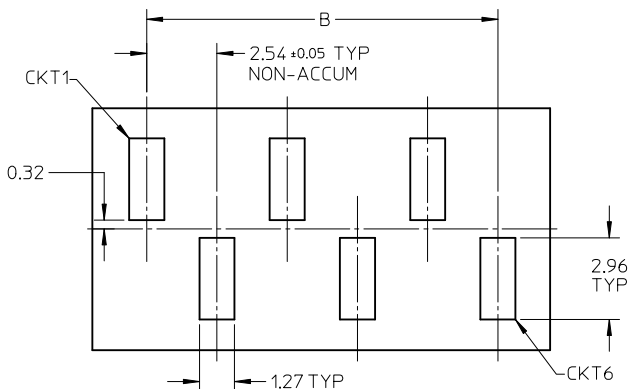
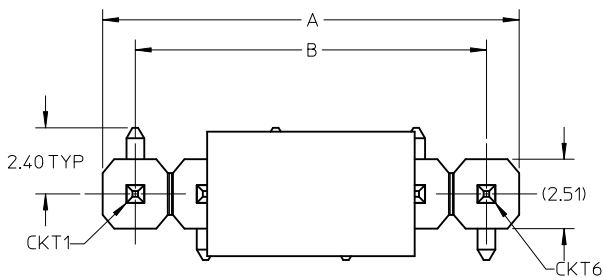
E

D

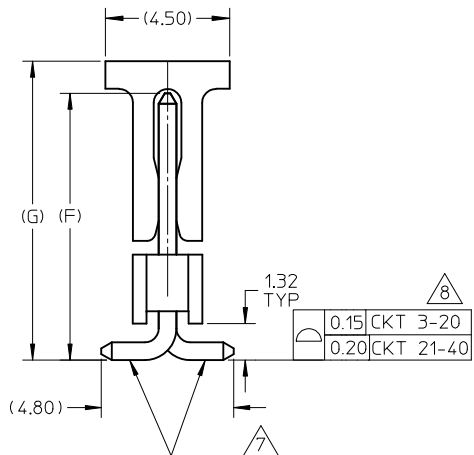
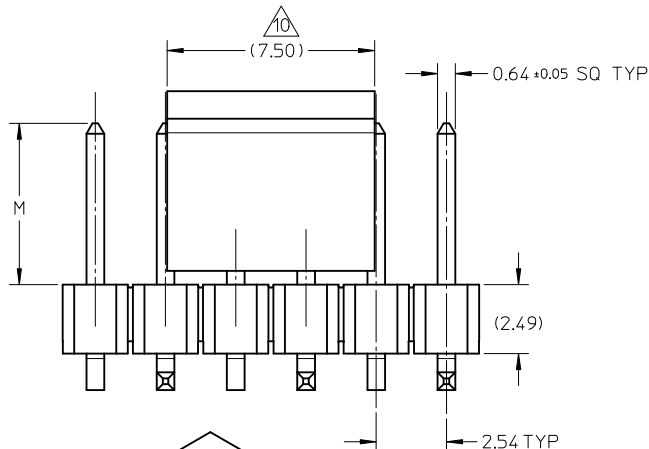
C

B

A



RECOMMENDED PCB LAYOUT: COMPONENT SIDE



NOTES:

1. MATERIAL:

HSG: NYLON, GLASS-FILLED, UL94V-0, COLOR: BLACK
CAP: NYLON, GLASS-FILLED, UL94V-0, COLOR: BLACK
PIN: 0.64MM SQ, COPPER ALLOY

2. PLATING TYPE:

- (1) GOLD FLASH OVER
1.25µm MIN. NICKEL OVERALL.
- (2) GOLD FLASH ON CONTACT AND
2.50µm MIN. TIN ON SOLDER TAIL OVER
1.25µm MIN. NICKEL OVERALL.
- (4) 0.38µm MIN. GOLD PLATE ON CONTACT AND
2.00µm MIN. TIN ON SOLDER TAIL OVER
1.25µm MIN. NICKEL OVERALL.
- (5) 0.75µm MIN. GOLD PLATE ON CONTACT AND
2.00µm MIN. TIN ON SOLDER TAIL OVER
1.25µm MIN. NICKEL OVERALL.
- (6) 2.50µm MIN. TIN OVERALL
1.25µm MIN. NICKEL OVERALL

3. PRODUCT SPECIFICATION: PS-87920-019

4. PACKAGING TYPE: SEE TABLE

5. PACKAGING SPEC:

TUBE WITH CAP VERSION: PK-89990-558
TUBE W/O CAP VERSION: PK-89990-545
EMBOSS TAPE WITH CAP: PK-89990-486

6. WAFER TO BE FLAT WITHIN 0.003 mm/mm

△ BEND DEPRESSION IS ACCEPTED SO LONG AS IT DOES NOT AFFECT THE OVERALL COPLANARITY OF TAIL

△ 8. COPLANARITY IS TO BE MEASURED BY RESTING THE SOLDER TAIL ON A FLAT SURFACE

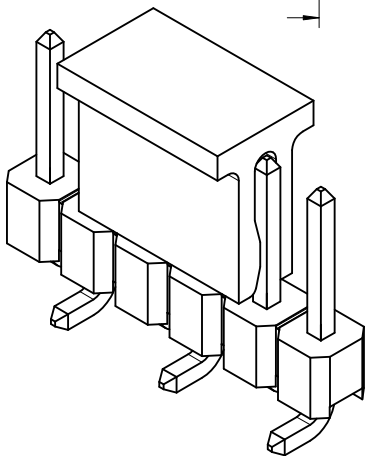
△ 9. IRREGULAR CIRCUIT CUTOFF WITHIN BREAKAWAY SECTION IS PERMISSIBLE. CUTTING OR CHIPPING OF THE MAIN BODY IS NOT ACCEPTABLE

△ 10. CAP LOCATION IS CENTERED ALONG THE MATING ENDS AS SHOWN. TOP SURFACE OF CAP TO BE FLAT FOR THE PURPOSE OF PICK & PLACE BY VACUUM SUCTION NOZZLE

11. RECOMMENDED PCB THICKNESS IS 1.60mm ± 0.10

12. THE ABOVE CKT 6 IS FOR ILLUSTRATION PURPOSE ONLY

13. TUBE LENGTH AS PER STANDARD 560mm



EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSEE 2010/05/20 CHKD:PTLIM 2010/03/29 APPR:MLONG 2010/06/08 REV B3	QUALITY SYMBOLS Ra=0 Rf=0 Rp=0	DESCRIPTION	REV	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
					mm	INCH	DRAWN BY YLQIAO	DATE 2005/03/14	CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED SD-87898-001				
				4 PLACES	± ---	± ---	CHECKED BY PTLIM	DATE 2005/03/29					
				3 PLACES	± ---	± ---	APPROVED BY MLONG	DATE 2010/03/10					
				2 PLACES	± 0.2	± ---	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87898-001					
				1 PLACE	± ---	± ---	ANGULAR ± 3 °		SHEET NO. 1 OF 20				
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

9 8 7 6 5 4 3 2 1

	10	9	8	7	6	5	4	3	2	1																																																																			
F	PACKAGING OPTION PART NO.						CKT SIZE	VOID POSITION	PLATING TYPE	DIMENSION																																																																			
	TRAY WITHOUT CAP	TRAY WITH CAP	TUBE WITHOUT CAP	TUBE WITH CAP	TAPE & REEL WITHOUT CAP	TAPE & REEL WITH CAP				A	B	G	F	M																																																															
	-----	-----	87898-0421	87898-0431	-----	87898-0451	4	-----	1	10.16	7.62	10.81	9.65	5.84																																																															
	-----	-----	87898-0422	87898-0432	-----	87898-0452	4	-----	2	10.16	7.62	10.81	9.65	5.84																																																															
	-----	-----	87898-0424	87898-0434	-----	87898-0454	4	-----	4	10.16	7.62	10.81	9.65	5.84																																																															
	-----	-----	87898-0425	87898-0435	-----	87898-0455	4	-----	5	10.16	7.62	10.81	9.65	5.84																																																															
	-----	-----	87898-0426	87898-0436	-----	87898-0456	4	-----	6	10.16	7.62	10.81	9.65	5.84																																																															
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	-----	-----	87898-0521	87898-0531	-----	87898-0551	5	-----	1	12.70	10.16	10.81	9.65	5.84																																																															
	-----	-----	87898-0522	87898-0532	-----	87898-0552	5	-----	2	12.70	10.16	10.81	9.65	5.84																																																															
	-----	-----	87898-0524	87898-0534	-----	87898-0554	5	-----	4	12.70	10.16	10.81	9.65	5.84																																																															
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D	-----	-----	87898-0526	87898-0536	-----	87898-0556	5	-----	6	12.70	10.16	10.81	9.65	5.84																																																															
	-----	-----	87898-0621	87898-0631	-----	87898-0651	6	-----	1	15.24	12.70	10.81	9.65	5.84																																																															
	-----	-----	87898-0622	87898-0632	-----	87898-0652	6	-----	2	15.24	12.70	10.81	9.65	5.84																																																															
	-----	-----	87898-0624	87898-0634	-----	87898-0654	6	-----	4	15.24	12.70	10.81	9.65	5.84																																																															
C	-----	-----	87898-0625	87898-0635	-----	87898-0655	6	-----	5	15.24	12.70	10.81	9.65	5.84																																																															
	-----	-----	87898-0626	87898-0636	-----	87898-0656	6	-----	6	15.24	12.70	10.81	9.65	5.84																																																															
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<table><tr><td rowspan="5">EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSE 2010/05/20 CHKD:PTLIM 2005/03/29 APPR:MLONG 2010/06/08 B3</td><td rowspan="5">DESCRIPTION REV</td><td>QUALITY SYMBOLS</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 colspan="2">THIRD ANGLE PROJECTION</td></tr><tr><td rowspan="4"> </td><td></td><td></td><td>DRAWN BY</td><td>DATE</td><td rowspan="4">TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED</td></tr><tr><td>4 PLACES</td><td>± ---</td><td>± ---</td><td>YLQIAO</td><td>2005/03/14</td></tr><tr><td>3 PLACES</td><td>± ---</td><td>± ---</td><td>CHECKED BY</td><td>DATE</td></tr><tr><td>2 PLACES</td><td>± 0.2</td><td>± ---</td><td>PTLIM</td><td>2005/03/29</td></tr><tr><td>1 PLACE</td><td>± ---</td><td>± ---</td><td>APPROVED BY</td><td>DATE</td><td rowspan="2">MOLEX INCORPORATED</td></tr><tr><td colspan="2">ANGULAR ± 3 °</td><td>MLONG</td><td>2010/03/10</td><td rowspan="2">DOCUMENT NO. SD-87898-001</td></tr><tr><td colspan="2">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td><td colspan="2">MATERIAL NO. SEE TABLE</td><td colspan="2">SHEET NO. 3 OF 20</td></tr><tr><td colspan="2">SIZE A3</td><td colspan="12">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</td></tr></table>															EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSE 2010/05/20 CHKD:PTLIM 2005/03/29 APPR:MLONG 2010/06/08 B3	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		 			DRAWN BY	DATE	TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED	4 PLACES	± ---	± ---	YLQIAO	2005/03/14	3 PLACES	± ---	± ---	CHECKED BY	DATE	2 PLACES	± 0.2	± ---	PTLIM	2005/03/29	1 PLACE	± ---	± ---	APPROVED BY	DATE	MOLEX INCORPORATED	ANGULAR ± 3 °		MLONG	2010/03/10	DOCUMENT NO. SD-87898-001	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		SHEET NO. 3 OF 20		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION											
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fb_frame_A3_P_AM_T Rev. F 2009/06/18	9	8	7	6	5	4	3	2	1																																																																				

	10	9	8	7	6	5	4	3	2	1							
F	PACKAGING OPTION PART NO.						CKT SIZE	VOID POSITION	PLATING TYPE	DIMENSION							
	TRAY WITHOUT CAP	TRAY WITH CAP	TUBE WITHOUT CAP	TUBE WITH CAP	TAPE & REEL WITHOUT CAP	TAPE & REEL WITH CAP				A	B	G	F	M			
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-----	-----	87898-0724	87898-0734	-----	87898-0754	7	-----	4	17.78	15.24	10.81	9.65	5.84				
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	-----	-----	87898-0825	87898-0835	-----	87898-0855	8	-----	5	20.32	17.78	10.81	9.65	5.84			
	-----	-----	87898-0826	87898-0836	-----	87898-0856	8	-----	6	20.32	17.78	10.81	9.65	5.84			
	-----	-----	87898-0921	87898-0931	-----	87898-0951	9	-----	1	22.86	20.32	10.81	9.65	5.84			
C	-----	-----	87898-0922	87898-0932	-----	87898-0952	9	-----	2	22.86	20.32	10.81	9.65	5.84			
	-----	-----	87898-0924	87898-0934	-----	87898-0954	9	-----	4	22.86	20.32	10.81	9.65	5.84			
	-----	-----	87898-0925	87898-0935	-----	87898-0955	9	-----	5	22.86	20.32	10.81	9.65	5.84			
	-----	-----	87898-0926	87898-0936	-----	87898-0956	9	-----	6	22.86	20.32	10.81	9.65	5.84			
B																	
A							EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSEE 2010/05/20 CHKD:PTLIM 2005/03/29 APPR:MLONG 2010/06/08 B3	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
									$\nabla=0$ $\nabla=0$ $\nabla=0$			DRAWN BY	DATE	TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED			
										4 PLACES	± ---	± ---	YLQIAO		2005/03/14		
										3 PLACES	± ---	± ---	CHECKED BY		DATE		
										2 PLACES	± 0.2	± ---	PTLIM		2005/03/29		
		1 PLACE	± ---	± ---	APPROVED BY	DATE	MOLEX	SD-87898-001	SHEET NO. 4 OF 20								
ANGULAR ± 3 °		MLONG	2010/03/10														
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION												
fb_frame_A3_P_AM_T Rev. F 2009/06/18	9	8	7	6	5	4	3	2	1								

10		9		8		7		6		5		4		3		2		1			
PACKAGING OPTION PART NO.										CKT SIZE	VOID POSITION	PLATING TYPE	DIMENSION								
F	TRAY WITHOUT CAP	TRAY WITH CAP	TUBE WITHOUT CAP	TUBE WITH CAP	TAPE & REEL WITHOUT CAP	TAPE & REEL WITH CAP	A	B	G				F	M							
	-----	-----	87898-1021	87898-1031	-----	87898-1051	10	-----	1	25.40	22.86	10.81	9.65	5.84							
	-----	-----	87898-1022	87898-1032	-----	87898-1052	10	-----	2	25.40	22.86	10.81	9.65	5.84							
-----	-----	87898-1024	87898-1034	-----	87898-1054	10	-----	4	25.40	22.86	10.81	9.65	5.84								
-----	-----	87898-1025	87898-1035	-----	87898-1055	10	-----	5	25.40	22.86	10.81	9.65	5.84								
-----	-----	87898-1026	87898-1036	-----	87898-1056	10	-----	6	25.40	22.86	10.81	9.65	5.84								
E																					
	-----	-----	87898-1121	87898-1131	-----	87898-1151	11	-----	1	27.94	25.40	10.81	9.65		5.84						
-----	-----	87898-1122	87898-1132	-----	87898-1152	11	-----	2	27.94	25.40	10.81	9.65	5.84								
-----	-----	87898-1124	87898-1134	-----	87898-1154	11	-----	4	27.94	25.40	10.81	9.65	5.84								
-----	-----	87898-1125	87898-1135	-----	87898-1155	11	-----	5	27.94	25.40	10.81	9.65	5.84								
-----	-----	87898-1126	87898-1136	-----	87898-1156	11	-----	6	27.94	25.40	10.81	9.65	5.84								
D																					
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-----	-----	87898-1226	87898-1236	-----	87898-1256	12	-----	6	30.48	27.94	10.81	9.65	5.84								
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EWR#1228, +0209 EC NO: S2010-0966 2010/05/20 DRWN:ATSE CHKD:PTLM 2005/03/29 APPR:MLONG 2010/06/08 REV DESCRIPTION										F=0 F=0 F=0	mm		INCH		DRAWN BY YLQIAO		DATE 2005/03/14		TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED SD-87898-001	SHEET NO. 5 OF 20	
											4 PLACES ± ---		± ---		CHECKED BY PTLIM		DATE 2005/03/29				
											3 PLACES ± ---		± ---		APPROVED BY MLONG		DATE 2010/03/10				
											2 PLACES ± 0.2		± ---		MATERIAL NO.		DOCUMENT NO.				
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fb_frame_A3_P_AM_T Rev. F 2009/06/18		9		8		7		6		5		4		3		2		1			

tb_frame_A3_P_AM_T
Rev. F 2009/06/18

	10	9	8	7	6	5	4	3	2	1					
F	PACKAGING OPTION PART NO.						CKT SIZE	VOID POSITION	PLATING TYPE	DIMENSION					
	TRAY WITHOUT CAP	TRAY WITH CAP	TUBE WITHOUT CAP	TUBE WITH CAP	TAPE & REEL WITHOUT CAP	TAPE & REEL WITH CAP				A	B	G	F	M	
	-----	-----	87898-1621	87898-1631	-----	87898-1651	16	-----	1	40.64	38.10	10.81	9.65	5.84	
	-----	-----	87898-1622	87898-1632	-----	87898-1652	16	-----	2	40.64	38.10	10.81	9.65	5.84	
	-----	-----	87898-1624	87898-1634	-----	87898-1654	16	-----	4	40.64	38.10	10.81	9.65	5.84	
E	-----	-----	87898-1625	87898-1635	-----	87898-1655	16	-----	5	40.64	38.10	10.81	9.65	5.84	
	-----	-----	87898-1626	87898-1636	-----	87898-1656	16	-----	6	40.64	38.10	10.81	9.65	5.84	
	-----	-----	87898-1721	87898-1731	-----	87898-1751	17	-----	1	43.18	40.64	10.81	9.65	5.84	
D	-----	-----	87898-1722	87898-1732	-----	87898-1752	17	-----	2	43.18	40.64	10.81	9.65	5.84	
	-----	-----	87898-1724	87898-1734	-----	87898-1754	17	-----	4	43.18	40.64	10.81	9.65	5.84	
	-----	-----	87898-1725	87898-1735	-----	87898-1755	17	-----	5	43.18	40.64	10.81	9.65	5.84	
	-----	-----	87898-1726	87898-1736	-----	87898-1756	17	-----	6	43.18	40.64	10.81	9.65	5.84	
C															
	-----	-----	87898-1821	87898-1831	-----	87898-1851	18	-----	1	45.72	43.18	10.81	9.65	5.84	
	-----	-----	87898-1822	87898-1832	-----	87898-1852	18	-----	2	45.72	43.18	10.81	9.65	5.84	
	-----	-----	87898-1824	87898-1834	-----	87898-1854	18	-----	4	45.72	43.18	10.81	9.65	5.84	
	-----	-----	87898-1825	87898-1835	-----	87898-1855	18	-----	5	45.72	43.18	10.81	9.65	5.84	
	-----	87898-1826	87898-1836	-----	87898-1856	18	-----	6	45.72	43.18	10.81	9.65	5.84		
B															
A															
ib_frame_A3_P_AM_T Rev. F 2009/06/18		9	8	7	6	5	4	3	2	1					

EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSE 2010/05/20 CHKD:PTLIM 2005/03/29 APPR:MLONG 2010/06/08 B3	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		 			DRAWN BY	DATE	TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED			
			4 PLACES	± ---	± ---	YLQIAO		2005/03/14		
			3 PLACES	± ---	± ---	CHECKED BY		DATE		
			2 PLACES	± 0.2	± ---	PTLIM		2005/03/29		
			1 PLACE	± ---	± ---	APPROVED BY	DATE	MOLEX	SD-87898-001	SHEET NO. 7 OF 20
			ANGULAR ± 3 °		MLONG	2010/03/10	DOCUMENT NO.			
			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				

[illegible]

10		9		8		7		6		5		4		3		2		1								
PACKAGING OPTION PART NO.																		CKT SIZE	VOID POSITION	PLATING TYPE	DIMENSION					
F	TRAY WITHOUT CAP	TRAY WITH CAP	TUBE WITHOUT CAP	TUBE WITH CAP	TAPE & REEL WITHOUT CAP	TAPE & REEL WITH CAP	A					B	G	F	M											
	-----	-----	87898-2221	87898-2231	-----	-----	22	-----	1	55.88	53.34	10.81	9.65	5.84												
	-----	-----	87898-2222	87898-2232	-----	-----	22	-----	2	55.88	53.34	10.81	9.65	5.84												
-----	-----	87898-2224	87898-2234	-----	-----	22	-----	4	55.88	53.34	10.81	9.65	5.84													
-----	-----	87898-2225	87898-2235	-----	-----	22	-----	5	55.88	53.34	10.81	9.65	5.84													
-----	-----	87898-2226	87898-2236	-----	-----	22	-----	6	55.88	53.34	10.81	9.65	5.84													
E																										
	-----	-----	87898-2321	87898-2331	-----	-----	23	-----	1	58.42	55.88	10.81	9.65	5.84												
-----	-----	87898-2322	87898-2332	-----	-----	23	-----	2	58.42	55.88	10.81	9.65	5.84													
-----	-----	87898-2324	87898-2334	-----	-----	23	-----	4	58.42	55.88	10.81	9.65	5.84													
D	-----	-----	87898-2325	87898-2335	-----	-----	23	-----	5	58.42	55.88	10.81	9.65	5.84												
	-----	-----	87898-2326	87898-2336	-----	-----	23	-----	6	58.42	55.88	10.81	9.65	5.84												
	-----	-----	87898-2421	87898-2431	-----	-----	24	-----	1	60.96	58.42	10.81	9.65	5.84												
	-----	-----	87898-2422	87898-2432	-----	-----	24	-----	2	60.96	58.42	10.81	9.65	5.84												
C	-----	-----	87898-2424	87898-2434	-----	-----	24	-----	4	60.96	58.42	10.81	9.65	5.84												
	-----	-----	87898-2425	87898-2435	-----	-----	24	-----	5	60.96	58.42	10.81	9.65	5.84												
	-----	-----	87898-2426	87898-2436	-----	-----	24	-----	6	60.96	58.42	10.81	9.65	5.84												
B																										
A																										
fb_frame_A3_P_AM_T Rev. F 2009/06/18		9		8		7		6		5		4		3		2		1								

EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSE 2010/05/20 CHKD:PTLM 2005/03/29 APPR:MLONG 2010/06/08 B3	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		  			DRAWN BY YLQIAO	DATE 2005/03/14	TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED			
			4 PLACES	± ---	± ---	CHECKED BY PTLIM		DATE 2005/03/29		
			3 PLACES	± ---	± ---	APPROVED BY MLONG		DATE 2010/03/10		
			2 PLACES	± 0.2	± ---	MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-87898-001		
1 PLACE	± ---	± ---	ANGULAR ± 3 °		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		SHEET NO. 9 OF 20		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS										

	10	9	8	7	6	5	4	3	2	1																							
F	PACKAGING OPTION PART NO.						CKT SIZE	VOID POSITION	PLATING TYPE	DIMENSION																							
	TRAY WITHOUT CAP	TRAY WITH CAP	TUBE WITHOUT CAP	TUBE WITH CAP	TAPE & REEL WITHOUT CAP	TAPE & REEL WITH CAP				A	B	G	F	M																			
	-----	-----	87898-2521	87898-2531	-----	-----				25	-----	1	63.50	60.96		10.81	9.65	5.84															
	-----	-----	87898-2522	87898-2532	-----	-----	25	-----	2	63.50	60.96	10.81	9.65	5.84																			
	-----	-----	87898-2524	87898-2534	-----	-----	25	-----	4	63.50	60.96	10.81	9.65	5.84																			
	-----	-----	87898-2525	87898-2535	-----	-----	25	-----	5	63.50	60.96	10.81	9.65	5.84																			
	-----	-----	87898-2526	87898-2536	-----	-----	25	-----	6	63.50	60.96	10.81	9.65	5.84																			
E																																	
	-----	-----	87898-2621	87898-2631	-----	-----	26	-----	1	66.04	63.50	10.81	9.65	5.84																			
	-----	-----	87898-2622	87898-2632	-----	-----	26	-----	2	66.04	63.50	10.81	9.65	5.84																			
	-----	-----	87898-2624	87898-2634	-----	-----	26	-----	4	66.04	63.50	10.81	9.65	5.84																			
	-----	-----	87898-2625	87898-2635	-----	-----	26	-----	5	66.04	63.50	10.81	9.65	5.84																			
	-----	-----	87898-2626	87898-2636	-----	-----	26	-----	6	66.04	63.50	10.81	9.65	5.84																			
D																																	
	-----	-----	87898-2721	87898-2731	-----	-----	27	-----	1	68.58	66.04	10.81	9.65	5.84																			
	-----	-----	87898-2722	87898-2732	-----	-----	27	-----	2	68.58	66.04	10.81	9.65	5.84																			
	-----	-----	87898-2724	87898-2734	-----	-----	27	-----	4	68.58	66.04	10.81	9.65	5.84																			
	-----	-----	87898-2725	87898-2735	-----	-----	27	-----	5	68.58	66.04	10.81	9.65	5.84																			
	-----	-----	87898-2726	87898-2736	-----	-----	27	-----	6	68.58	66.04	10.81	9.65	5.84																			
C																																	
B																																	
A																																	
											EWR#1228, +0209 EC NO: S2010-0966 2010/05/20 DRAWN:ATSE 2005/03/29 CHKD:PTLIM APPR:MLONG 2010/06/08					QUALITY SYMBOLS F _A =0 F _G =0 F _P =0		GENERAL TOLERANCES (UNLESS SPECIFIED) mmINCH 4 PLACES±---±--- 3 PLACES±---±--- 2 PLACES±0.2±--- 1 PLACE±---±--- ANGULAR ± 3 °		DIMENSION STYLE MM ONLY DRAWN BYDATE YLOIAO2005/03/14 CHECKED BYDATE PTLIM2005/03/29 APPROVED BYDATE MLONG2010/03/10		SCALE NTS		DESIGN UNITS METRIC		THIRD ANGLE PROJECTION		CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER		MOLEX INCORPORATED		SHEET NO. 10 OF 20	
											B3		REV		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION														
fb_frame_A3_P_AM_T Rev. F 2009/06/18											9	8	7	6	5	4	3	2	1														

	10	9	8	7	6	5	4	3	2	1																																															
F	PACKAGING OPTION PART NO.					CKT SIZE	VOID POSITION	PLATING TYPE	DIMENSION																																																
	TRAY WITHOUT CAP	TRAY WITH CAP	TUBE WITHOUT CAP	TUBE WITH CAP	TAPE & REEL WITHOUT CAP				TAPE & REEL WITH CAP	A	B	G	F		M																																										
	-----	-----	87898-2821	87898-2831	-----	-----	28	-----	1	71.12	68.58	10.81	9.65	5.84																																											
	-----	-----	87898-2822	87898-2832	-----	-----	28	-----	2	71.12	68.58	10.81	9.65	5.84																																											
	-----	-----	87898-2824	87898-2834	-----	-----	28	-----	4	71.12	68.58	10.81	9.65	5.84																																											
	-----	-----	87898-2825	87898-2835	-----	-----	28	-----	5	71.12	68.58	10.81	9.65	5.84																																											
	-----	-----	87898-2826	87898-2836	-----	-----	28	-----	6	71.12	68.58	10.81	9.65	5.84																																											
E																																																									
	-----	-----	87898-2921	87898-2931	-----	-----	29	-----	1	73.66	71.12	10.81	9.65	5.84																																											
	-----	-----	87898-2922	87898-2932	-----	-----	29	-----	2	73.66	71.12	10.81	9.65	5.84																																											
	-----	-----	87898-2924	87898-2934	-----	-----	29	-----	4	73.66	71.12	10.81	9.65	5.84																																											
	-----	-----	87898-2925	87898-2935	-----	-----	29	-----	5	73.66	71.12	10.81	9.65	5.84																																											
D	-----	-----	87898-2926	87898-2936	-----	-----	29	-----	6	73.66	71.12	10.81	9.65	5.84																																											
	-----	-----	87898-3021	87898-3031	-----	-----	30	-----	1	76.20	73.66	10.81	9.65	5.84																																											
	-----	-----	87898-3022	87898-3032	-----	-----	30	-----	2	76.20	73.66	10.81	9.65	5.84																																											
	-----	-----	87898-3024	87898-3034	-----	-----	30	-----	4	76.20	73.66	10.81	9.65	5.84																																											
C	-----	-----	87898-3025	87898-3035	-----	-----	30	-----	5	76.20	73.66	10.81	9.65	5.84																																											
	-----	-----	87898-3026	87898-3036	-----	-----	30	-----	6	76.20	73.66	10.81	9.65	5.84																																											
B																																																									
A																																																									
<table><tr><td rowspan="5">EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSEE 2010/05/20 CHKD:PTLIM 2005/03/29 APPR:MLONG 2010/06/08 B3</td><td rowspan="5">REV DESCRIPTION</td><td>QUALITY SYMBOLS</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 colspan="2">THIRD ANGLE PROJECTION</td></tr><tr><td rowspan="4"> </td><td></td><td>mm</td><td>INCH</td><td>DRAWN BY YLQIAO</td><td>DATE 2005/03/14</td><td rowspan="4">TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED</td></tr><tr><td>4 PLACES</td><td>± ---</td><td>± ---</td><td>CHECKED BY PTLIM</td><td>DATE 2005/03/29</td></tr><tr><td>3 PLACES</td><td>± ---</td><td>± ---</td><td>APPROVED BY MLONG</td><td>DATE 2010/03/10</td></tr><tr><td>2 PLACES</td><td>± 0.2</td><td>± ---</td><td>MATERIAL NO. SEE TABLE</td><td>DOCUMENT NO. SD-87898-001</td></tr><tr><td>1 PLACE</td><td>± ---</td><td>± ---</td><td colspan="2">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td><td>SIZE A3</td><td colspan="2">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</td><td>SHEET NO. 11 OF 20</td></tr></table>																EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSEE 2010/05/20 CHKD:PTLIM 2005/03/29 APPR:MLONG 2010/06/08 B3	REV DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		 		mm	INCH	DRAWN BY YLQIAO	DATE 2005/03/14	TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED	4 PLACES	± ---	± ---	CHECKED BY PTLIM	DATE 2005/03/29	3 PLACES	± ---	± ---	APPROVED BY MLONG	DATE 2010/03/10	2 PLACES	± 0.2	± ---	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87898-001	1 PLACE	± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		SHEET NO. 11 OF 20
EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSEE 2010/05/20 CHKD:PTLIM 2005/03/29 APPR:MLONG 2010/06/08 B3	REV DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION																																																
		 		mm	INCH	DRAWN BY YLQIAO	DATE 2005/03/14	TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED																																																	
			4 PLACES	± ---	± ---	CHECKED BY PTLIM	DATE 2005/03/29																																																		
			3 PLACES	± ---	± ---	APPROVED BY MLONG	DATE 2010/03/10																																																		
			2 PLACES	± 0.2	± ---	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87898-001																																																		
1 PLACE	± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		SHEET NO. 11 OF 20																																																	
fb_frame_A3_P_AM_T Rev. F 2009/06/18	9	8	7	6	5	4	3	2	1																																																

	10	9	8	7	6	5	4	3	2	1																																																									
F	PACKAGING OPTION PART NO.						CKT SIZE	VOID POSITION	PLATING TYPE	DIMENSION																																																									
	TRAY WITHOUT CAP	TRAY WITH CAP	TUBE WITHOUT CAP	TUBE WITH CAP	TAPE & REEL WITHOUT CAP	TAPE & REEL WITH CAP				A	B	G	F	M																																																					
	-----	-----	87898-3121	87898-3131	-----	-----	31	-----	1	78.74	76.20	10.81	9.65	5.84																																																					
	-----	-----	87898-3122	87898-3132	-----	-----	31	-----	2	78.74	76.20	10.81	9.65	5.84																																																					
	-----	-----	87898-3124	87898-3134	-----	-----	31	-----	4	78.74	76.20	10.81	9.65	5.84																																																					
	-----	-----	87898-3125	87898-3135	-----	-----	31	-----	5	78.74	76.20	10.81	9.65	5.84																																																					
	-----	-----	87898-3126	87898-3136	-----	-----	31	-----	6	78.74	76.20	10.81	9.65	5.84																																																					
E																																																																			
	-----	-----	87898-3221	87898-3231	-----	-----	32	-----	1	81.28	78.74	10.81	9.65	5.84																																																					
	-----	-----	87898-3222	87898-3232	-----	-----	32	-----	2	81.28	78.74	10.81	9.65	5.84																																																					
D	-----	-----	87898-3224	87898-3234	-----	-----	32	-----	4	81.28	78.74	10.81	9.65	5.84																																																					
	-----	-----	87898-3225	87898-3235	-----	-----	32	-----	5	81.28	78.74	10.81	9.65	5.84																																																					
	-----	-----	87898-3226	87898-3236	-----	-----	32	-----	6	81.28	78.74	10.81	9.65	5.84																																																					
	-----	-----	87898-3321	87898-3331	-----	-----	33	-----	1	83.82	81.28	10.81	9.65	5.84																																																					
	-----	-----	87898-3322	87898-3332	-----	-----	33	-----	2	83.82	81.28	10.81	9.65	5.84																																																					
	-----	-----	87898-3324	87898-3334	-----	-----	33	-----	4	83.82	81.28	10.81	9.65	5.84																																																					
C	-----	-----	87898-3325	87898-3335	-----	-----	33	-----	5	83.82	81.28	10.81	9.65	5.84																																																					
	-----	-----	87898-3326	87898-3336	-----	-----	33	-----	6	83.82	81.28	10.81	9.65	5.84																																																					
B																																																																			
A																																																																			
<table><tr><td rowspan="3">EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSE 2010/05/20 CHKD:PTLM 2005/03/29 APPR:MLONG 2010/06/08</td><td rowspan="3">DESCRIPTION REV</td><td rowspan="3">QUALITY SYMBOLS F=0 F=0 F=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 colspan="2">THIRD ANGLE PROJECTION</td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>4 PLACES</td><td>± ---</td><td>± ---</td><td>DRAWN BY YLQIAO</td><td>DATE 2005/03/14</td><td colspan="2">TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER</td></tr><tr><td>3 PLACES</td><td>± ---</td><td>± ---</td><td>CHECKED BY PTLIM</td><td>DATE 2005/03/29</td><td colspan="2">MOLEX INCORPORATED</td></tr><tr><td>2 PLACES</td><td>± 0.2</td><td>± ---</td><td>APPROVED BY MLONG</td><td>DATE 2010/03/10</td><td colspan="2">SD-87898-001</td></tr><tr><td>1 PLACE</td><td>± ---</td><td>± ---</td><td>MATERIAL NO.</td><td colspan="2">DOCUMENT NO.</td><td>SHEET NO. 12 OF 20</td></tr><tr><td colspan="3">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td><td colspan="2">SEE TABLE</td><td colspan="2">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</td></tr></table>																EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSE 2010/05/20 CHKD:PTLM 2005/03/29 APPR:MLONG 2010/06/08	DESCRIPTION REV	QUALITY SYMBOLS F=0 F=0 F=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION								4 PLACES	± ---	± ---	DRAWN BY YLQIAO	DATE 2005/03/14	TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER		3 PLACES	± ---	± ---	CHECKED BY PTLIM	DATE 2005/03/29	MOLEX INCORPORATED		2 PLACES	± 0.2	± ---	APPROVED BY MLONG	DATE 2010/03/10	SD-87898-001		1 PLACE	± ---	± ---	MATERIAL NO.	DOCUMENT NO.		SHEET NO. 12 OF 20	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	
EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSE 2010/05/20 CHKD:PTLM 2005/03/29 APPR:MLONG 2010/06/08	DESCRIPTION REV	QUALITY SYMBOLS F=0 F=0 F=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION																																																										
			4 PLACES	± ---	± ---	DRAWN BY YLQIAO	DATE 2005/03/14	TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER																																																											
3 PLACES	± ---	± ---	CHECKED BY PTLIM	DATE 2005/03/29	MOLEX INCORPORATED																																																														
2 PLACES	± 0.2	± ---	APPROVED BY MLONG	DATE 2010/03/10	SD-87898-001																																																														
1 PLACE	± ---	± ---	MATERIAL NO.	DOCUMENT NO.		SHEET NO. 12 OF 20																																																													
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																																																														
fb_frame_A3_P_AM_T Rev. F 2009/06/18	9	8	7	6	5	4	3	2	1																																																										

	10	9	8	7	6	5	4	3	2	1					
F	PACKAGING OPTION PART NO.						CKT SIZE	VOID POSITION	PLATING TYPE	DIMENSION					
	TRAY WITHOUT CAP	TRAY WITH CAP	TUBE WITHOUT CAP	TUBE WITH CAP	TAPE & REEL WITHOUT CAP	TAPE & REEL WITH CAP				A	B	G	F	M	
	-----	-----	87898-3421	87898-3431	-----	-----				34	----	1	86.36	83.82	
	-----	-----	87898-3422	87898-3432	-----	-----	34	----	2	86.36	83.82	10.81	9.65	5.84	
	-----	-----	87898-3424	87898-3434	-----	-----	34	----	4	86.36	83.82	10.81	9.65	5.84	
	-----	-----	87898-3425	87898-3435	-----	-----	34	----	5	86.36	83.82	10.81	9.65	5.84	
	-----	-----	87898-3426	87898-3436	-----	-----	34	----	6	86.36	83.82	10.81	9.65	5.84	
E															
	-----	-----	87898-3521	87898-3531	-----	-----	35	----	1	88.90	86.36	10.81	9.65	5.84	
	-----	-----	87898-3522	87898-3532	-----	-----	35	----	2	88.90	86.36	10.81	9.65	5.84	
	-----	-----	87898-3524	87898-3534	-----	-----	35	----	4	88.90	86.36	10.81	9.65	5.84	
	-----	-----	87898-3525	87898-3535	-----	-----	35	----	5	88.90	86.36	10.81	9.65	5.84	
	-----	-----	87898-3526	87898-3536	-----	-----	35	----	6	88.90	86.36	10.81	9.65	5.84	
D															
	-----	-----	87898-3621	87898-3631	-----	-----	36	----	1	91.44	88.90	10.81	9.65	5.84	
	-----	-----	87898-3622	87898-3632	-----	-----	36	----	2	91.44	88.90	10.81	9.65	5.84	
	-----	-----	87898-3624	87898-3634	-----	-----	36	----	4	91.44	88.90	10.81	9.65	5.84	
	-----	-----	87898-3625	87898-3635	-----	-----	36	----	5	91.44	88.90	10.81	9.65	5.84	
	-----	-----	87898-3626	87898-3636	-----	-----	36	----	6	91.44	88.90	10.81	9.65	5.84	
C															
B															
A															
EWB#1228, +0209 EC NO: S2010-0966 DRWN:ATSE 2010/05/20 CHKD:PTLIM 2005/03/29 APPR:MLONG 2010/06/08 B3							QUALITY SYMBOLS $F_A=0$ $F_G=0$ $F_P=0$	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES $\pm$ --- $\pm$ --- 3 PLACES $\pm$ --- $\pm$ --- 2 PLACES $\pm$ 0.2 $\pm$ --- 1 PLACE $\pm$ --- $\pm$ --- ANGULAR $\pm$ 3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION STYLE MM ONLY DRAWN BY DATE YLOIAO 2005/03/14 CHECKED BY DATE PTLIM 2005/03/29 APPROVED BY DATE MLONG 2010/03/10 MATERIAL NO. SEE TABLE	SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED DOCUMENT NO. SD-87898-001 SHEET NO. 13 OF 20	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
fb_frame_A3_P_AM_T	9	8	7	6	5	4	3	2	1						
Rev. F 2009/06/18															

	10	9	8	7	6	5	4	3	2	1																																									
	PACKAGING OPTION PART NO.						CKT SIZE	VOID POSITION	PLATING TYPE	DIMENSION																																									
	TRAY WITHOUT CAP	TRAY WITH CAP	TUBE WITHOUT CAP	TUBE WITH CAP	TAPE & REEL WITHOUT CAP	TAPE & REEL WITH CAP				A	B	G	F	M																																					
F	-----	-----	87898-3721	87898-3731	-----	-----	37	-----	1	93.98	91.44	10.81	9.65	5.84	F																																				
	-----	-----	87898-3722	87898-3732	-----	-----	37	-----	2	93.98	91.44	10.81	9.65	5.84																																					
	-----	-----	87898-3724	87898-3734	-----	-----	37	-----	4	93.98	91.44	10.81	9.65	5.84																																					
	-----	-----	87898-3725	87898-3735	-----	-----	37	-----	5	93.98	91.44	10.81	9.65	5.84																																					
	-----	-----	87898-3726	87898-3736	-----	-----	37	-----	6	93.98	91.44	10.81	9.65	5.84																																					
E															E																																				
	-----	-----	87898-3821	87898-3831	-----	-----	38	-----	1	96.52	93.98	10.81	9.65	5.84																																					
	-----	-----	87898-3822	87898-3832	-----	-----	38	-----	2	96.52	93.98	10.81	9.65	5.84																																					
	-----	-----	87898-3824	87898-3834	-----	-----	38	-----	4	96.52	93.98	10.81	9.65	5.84																																					
	-----	-----	87898-3825	87898-3835	-----	-----	38	-----	5	96.52	93.98	10.81	9.65	5.84																																					
D	-----	-----	87898-3826	87898-3836	-----	-----	38	-----	6	96.52	93.98	10.81	9.65	5.84	D																																				
	-----	-----	87898-3921	87898-3931	-----	-----	39	-----	1	99.06	96.52	10.81	9.65	5.84																																					
	-----	-----	87898-3922	87898-3932	-----	-----	39	-----	2	99.06	96.52	10.81	9.65	5.84																																					
	-----	-----	87898-3924	87898-3934	-----	-----	39	-----	4	99.06	96.52	10.81	9.65	5.84																																					
C	-----	-----	87898-3925	87898-3935	-----	-----	39	-----	5	99.06	96.52	10.81	9.65	5.84	C																																				
	-----	-----	87898-3926	87898-3936	-----	-----	39	-----	6	99.06	96.52	10.81	9.65	5.84																																					
B															B																																				
A															A																																				
<table><tr><td rowspan="5">EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSEE 2010/05/20 CHKDPTLIM 2005/03/29 APPR:MLONG 2010/06/08 B3</td><td rowspan="5">DESCRIPTION REV</td><td>QUALITY SYMBOLS</td><td colspan="2">GENERAL TOLERANCES (UNLESS SPECIFIED)</td><td colspan="2">DIMENSION STYLE</td><td>SCALE</td><td>DESIGN UNITS</td><td colspan="2">THIRD ANGLE PROJECTION</td></tr><tr><td rowspan="4"> </td><td rowspan="4">mm INCH</td><td colspan="2">MM ONLY</td><td rowspan="4">NTS</td><td rowspan="4">METRIC</td><td colspan="2" rowspan="4">CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED</td></tr><tr><td colspan="2">DRAWN BY DATE</td></tr><tr><td colspan="2">CHECKED BY DATE</td></tr><tr><td colspan="2">APPROVED BY DATE</td></tr><tr><td colspan="2">MATERIAL NO.</td><td colspan="2">DOCUMENT NO.</td><td colspan="2">SHEET NO.</td></tr><tr><td colspan="2">SIZE A3</td><td colspan="2">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</td><td colspan="2"></td></tr></table>															EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSEE 2010/05/20 CHKDPTLIM 2005/03/29 APPR:MLONG 2010/06/08 B3	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		 	mm INCH	MM ONLY		NTS	METRIC	CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED		DRAWN BY DATE		CHECKED BY DATE		APPROVED BY DATE		MATERIAL NO.		DOCUMENT NO.		SHEET NO.		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSEE 2010/05/20 CHKDPTLIM 2005/03/29 APPR:MLONG 2010/06/08 B3	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION																																										
		 	mm INCH	MM ONLY		NTS	METRIC	CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED																																											
				DRAWN BY DATE																																															
				CHECKED BY DATE																																															
				APPROVED BY DATE																																															
MATERIAL NO.		DOCUMENT NO.		SHEET NO.																																															
SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																																																	
fb_frame_A3_P_AM_T Rev. F 2009/06/18	9	8	7	6	5	4	3	2	1																																										

tb_frame_A3_P_AM_T
Rev. F 2009/06/18

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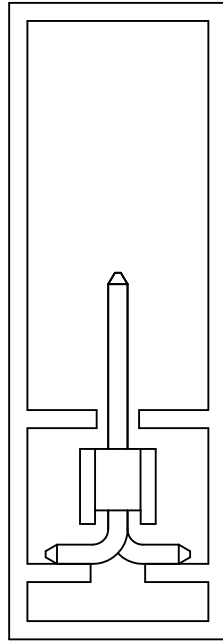
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3

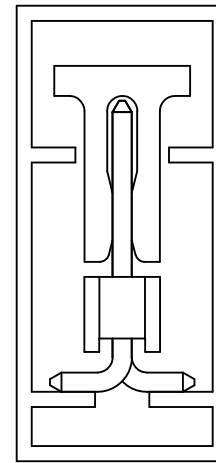
2

1

PART WITHOUT CAP
IN TUBE ORIENTATION



PART WITH CAP
IN TUBE ORIENTATION



EWR#1228, +0209 EC NO: S2010-0966 2010/05/20 DRWN:ATSEE CHKD:PTLIM 2005/03/29 APPR:MLONG 2010/06/08	DESCRIPTION REV	QUALITY SYMBOLS FA=0 FC=0 FE=0	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
				mm	INCH	DRAWN BY YLQIAO	DATE 2005/03/14	TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER				
			4 PLACES	± ---	± ---	CHECKED BY PTLIM	DATE 2005/03/29					
			3 PLACES	± ---	± ---	APPROVED BY MLONG	DATE 2010/03/10				MOLEX INCORPORATED	
			2 PLACES	± 0.2	± ---	MATERIAL NO. SEE TABLE						DOCUMENT NO. SD-87898-001
			1 PLACE	± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			
			ANGULAR ± 3 °									

9

8

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6

5

4

3

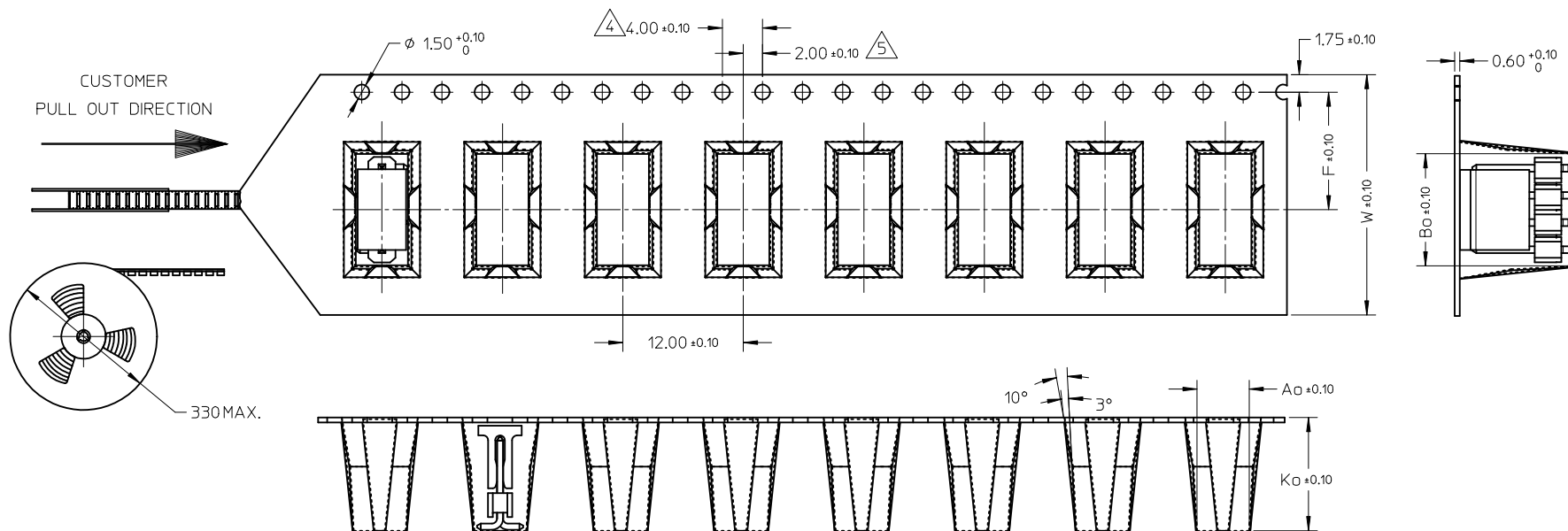
2

1

10 9 8 7 6 5 4 3 2 1

CKT	DIMENSION				
	Bo	Ao	Ko	F	W
2	8.02	5.20	13.60	11.50	24.00
4	10.55	5.20	11.30	11.50	24.00

EMBOSSED CARRIER TYPE 'A'



NOTES:

1. LEADER AND TRAILER TAPE

160 MIN. TOP TAPE TRAILER

390 MIN. TOP TAPE NON BONDED TAPE

160 MIN. TAIL PART (EMPTY)

230 MIN. LEADER PART (EMPTY)

2. PEELING OFF FORCE OF THE TOP TAPE: 20 - 80gf. (PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)

PEEL OFF DIRECTION

15° MAX.

PULL OUT DIRECTION

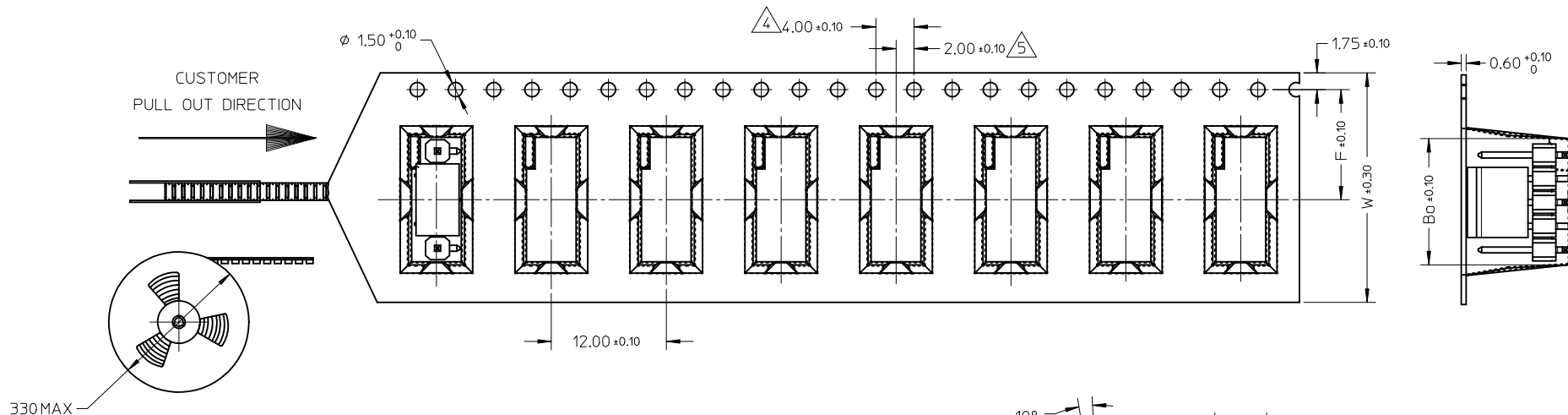
- MATERIAL: BLACK P.S CONDUCTIVE, BLACK
- MEASURED FROM CENTRELINE OF SPROCKET HOLE TO CENTRELINE OF SPOCKET
- CUMULATIVE TOLERANCE OF 10 SPROCKET HOLE IS $\pm 0.20\text{mm}$
- A0 AND B0 ARE MEASURED FROM ABOVE POCKET BASE 0.30mm
- TAPE AND REEL SPECIFICATION IS AS PER EIA-481.
- TAPE AND REEL QUANTITY : 440PCS/REEL
- THE TAPE IS TREATED FOR ANTI-STATIC.
- ALL RADIUS ARE 0.30mm UNLESS SPECIFY
- SURFACE RESISTIVITY 10^3 TO 10^9 OHMS.

PART PACK IN E/TAPE ORIENTATION (FOR REF USE)

EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSEE CHKD:PTLIM APPR:MLONG REV B3	QUALITY SYMBOLS 	DESCRIPTION 2010/05/20 2005/03/29 2010/06/08	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION			
			mm	INCH	DRAWN BY YLQIAO	DATE 2005/03/14	TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER					
			4 PLACES	± ---	± ---	CHECKED BY PTLIM						DATE 2005/03/29
			3 PLACES	± ---	± ---	APPROVED BY MLONG						DATE 2010/03/10
			2 PLACES	± 0.2	± ---	MOLEX MOLEX INCORPORATED		DOCUMENT NO. SD-87898-001		SHEET NO. 17 OF 20		
1 PLACE	± ---	± ---	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

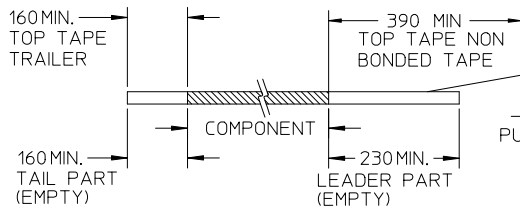
10 9 8 7 6 5 4 3 2 1

CKT	DIMENSION				
	Bo	Ao	Ko	F	W
5	13.10	5.20	11.30	11.50	24.00

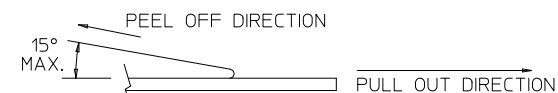


NOTES:

1. LEADER AND TRAILER TAPE



2. PEELING OFF FORCE OF THE TOP TAPE: 20 - 80gf.
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)

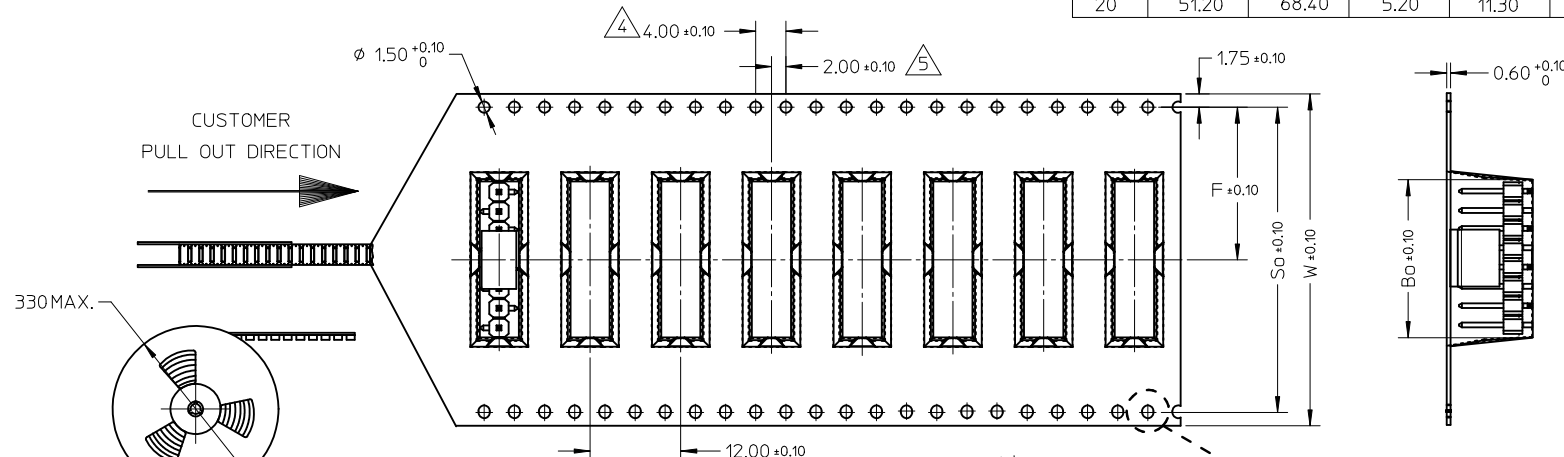


3. MATERIAL: BLACK P.S CONDUCTIVE, BLACK
4. MEASURED FROM CENTRELINE OF SPROCKET HOLE TO CENTRELINE OF SPOCKET
5. CUMULATIVE TOLERANCE OF 10 SPROCKET HOLE IS $\pm 0.20\text{mm}$
6. A0 AND B0 ARE MEASURED FROM ABOVE SPOCKET BASE 0.30mm
7. TAPE AND REEL SPECIFICATION IS AS PER EIA-481.
8. TAPE AND REEL QUANTITY : 440PCS/REEL
9. THE TAPE IS TREATED FOR ANTI-STATIC.
10. ALL RADIUS ARE 0.30MM UNLESS SPECIFY
11. SURFACE RESISTIVITY 10^3 TO 10^9 OHMS.

PART PACK
IN E/TAPE
ORIENTATION
(FOR REF USE)

QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	mm	INCH	MM ONLY	DATE	NTS	METRIC	
$\nabla F=0$	4 PLACES	$\pm \text{---}$	YLO1A0	2005/03/14			CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER
$\nabla F=0$	3 PLACES	$\pm \text{---}$	CHECKED BY	DATE			
$\nabla F=0$	2 PLACES	± 0.2	PTL IM	2005/03/29			MOLEX INCORPORATED
	1 PLACE	$\pm \text{---}$	APPROVED BY	DATE			
	ANGULAR $\pm 3^\circ$		MLONG	2010/03/10			SD-87898-001
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.	DOCUMENT NO.			
	SEE TABLE		SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			SHEET NO. 18 OF 20

CKT	DIMENSION					
	Bo	So	Ao	Ko	F	W
6	15.65	28.40	5.20	11.30	14.20	32.00
8	20.70	40.40	5.20	11.30	20.20	44.00
10	25.80	40.40	5.20	11.30	20.20	44.00
12	30.90	52.40	5.20	11.30	26.20	56.00
14	35.95	52.40	5.20	11.30	26.20	56.00
16	41.05	52.40	5.20	11.30	26.20	56.00
18	46.20	68.40	5.20	11.30	34.20	72.00
20	51.20	68.40	5.20	11.30	34.20	72.00



NOTES:

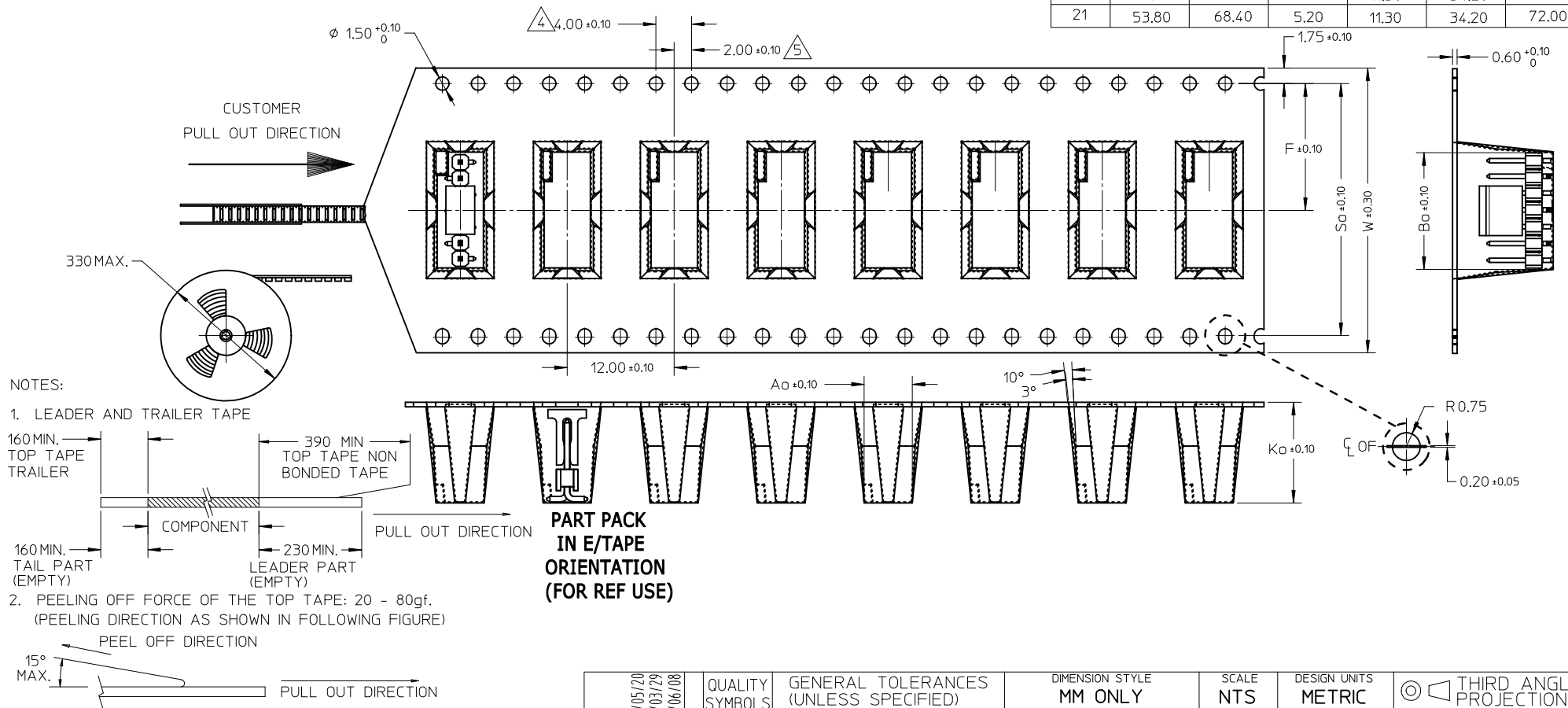
- LEADER AND TRAILER TAPE
160 MIN. TOP TAPE TRAILER
390 MIN. TOP TAPE NON BONDED TAPE
160 MIN. TAIL PART (EMPTY)
230 MIN. LEADER PART (EMPTY)
PULL OUT DIRECTION
- PEELING OFF FORCE OF THE TOP TAPE: 20 - 80gf.
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)
PEEL OFF DIRECTION
15° MAX.

- MATERIAL: BLACK P.S CONDUCTIVE, BLACK
- MEASURED FROM CENTRELINE OF SPROCKET HOLE TO CENTRELINE OF SPOCKET
- CUMULATIVE TOLERANCE OF 10 SPROCKET HOLE IS ± 0.20 mm
- A0 AND B0 ARE MEASURED FROM ABOVE POCKET BASE 0.30mm
- TAPE AND REEL SPECIFICATION IS AS PER EIA-481.
- TAPE AND REEL QUANTITY : 440PCS/REEL
- THE TAPE IS TREATED FOR ANTI-STATIC.
- ALL RADIUS ARE 0.30MM UNLESS SPECIFY
- SURFACE RESISTIVITY 10^3 TO 10^9 OHMS.

PART PACK
IN E/TAPE
ORIENTATION
(FOR REF USE)

EWR#1228, +0209 EC NO: S2010-0966 DRW: N1SEE CHKD: PTLIM APPR: MLONG 2010/05/20 2005/03/29 2010/06/08		QUALITY SYMBOLS $\nabla F=0$ $\nabla F=0$ $\nabla F=0$	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES $\pm$ --- $\pm$ --- 3 PLACES $\pm$ --- $\pm$ --- 2 PLACES ± 0.2 $\pm$ --- 1 PLACE $\pm$ --- $\pm$ --- ANGULAR $\pm 3^\circ$	DIMENSION STYLE MM ONLY DRAWN BY YLQ1A0 CHECKED BY PTLIM APPROVED BY MLONG DATE 2005/03/14 DATE 2005/03/29 DATE 2010/03/10	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER	
B3		REV	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	MOLEX INCORPORATED SD-87898-001		SHEET NO. 19 OF 20	

CKT	DIMENSION					
	Bo	So	Ao	Ko	F	W
7	18.20	40.40	5.20	11.30	20.20	44.00
9	23.25	40.40	5.20	11.30	20.20	44.00
11	28.35	40.40	5.20	11.30	20.20	44.00
13	33.40	52.40	5.20	11.30	26.20	56.00
15	38.50	52.40	5.20	11.30	26.20	56.00
17	43.60	68.40	5.20	11.30	34.20	72.00
19	48.70	68.40	5.20	11.30	34.20	72.00
21	53.80	68.40	5.20	11.30	34.20	72.00



EWR#1228, +0209		DESCRIPTION		QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION	
EC NO: S2010-0966				F _A =0		mm INCH		MM ONLY		NTS		METRIC			
2010/05/20				F _C =0		4 PLACES ± --- ± ---		DRAWN BY YLOIAO		DATE 2005/03/14		TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER			
2005/03/29				F _E =0		3 PLACES ± --- ± ---		CHECKED BY		DATE					
2010/06/08				F _P =0		2 PLACES ± 0.2 ± ---		PTLIM		2005/03/29					
						1 PLACE ± --- ± ---		APPROVED BY		DATE		MOLEX MOLEX INCORPORATED			
						ANGULAR ± 3 °		MLONG		2010/03/10					
								MATERIAL NO.		DOCUMENT NO.		SHEET NO.			
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		SD-87898-001		20 OF 20			
B3		REV						SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					