

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0878980526

Status:

Active

Overview:

kk

Description:

2.54mm (.100") Pitch KK® Header, Surface Mount, Breakaway, Vertical, 5 Circuits, Tin (Sn) Overall Plating, Tube Packaging, without Cap, Lead- free

Documents:

3D Model

RoHS Certificate of Compliance (PDF)

Drawing (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)

5

Circuits (maximum)

5

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

Tin

Material - Plating Termination

Tin

Material - Resin

Nylon

Number of Rows

1

Orientation

Vertical

PCB Locator

No

PCB Retention

None

Packaging Type

Tube

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

None

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

Solder Process Data

Duration at Max. Process Temperature (seconds)

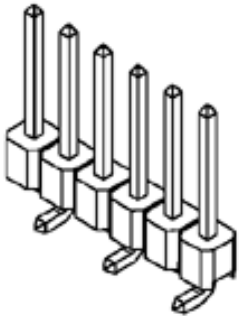
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Lead-free Process Capability

Reflow Capable (SMT only)

Max. Cycles at Max. Process Temperature

3



Series

image - Reference only

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

Process Temperature max. C	260
Material Info	
Reference - Drawing Numbers	
Packaging Specification	PK-89990-545
Sales Drawing	SD-87898-001

This document was generated on 05/25/2010

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F

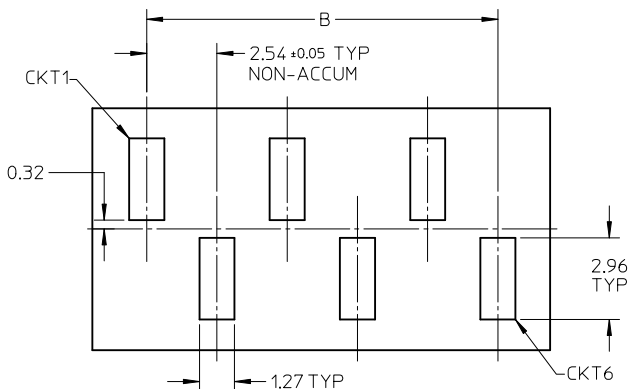
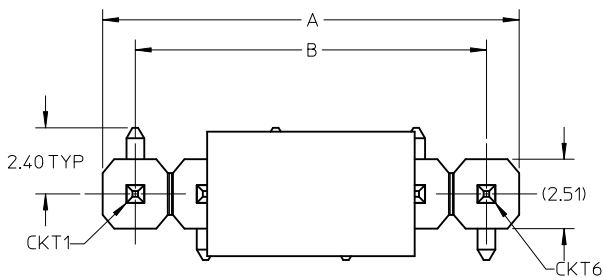
E

D

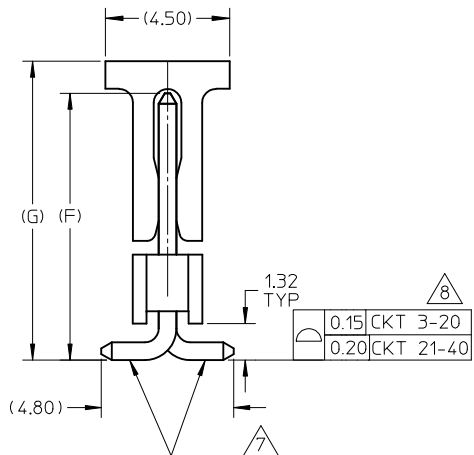
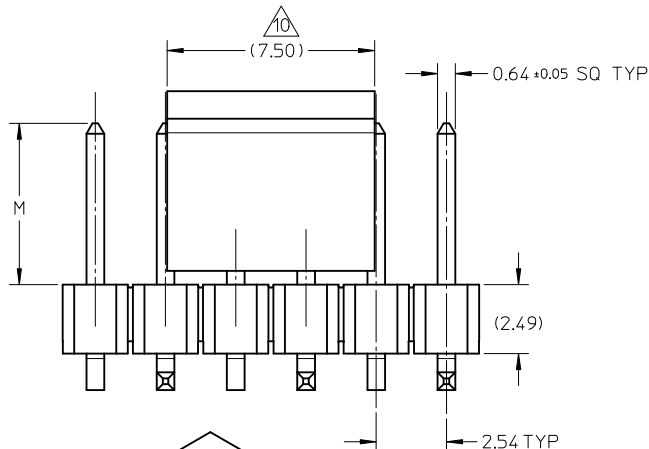
C

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

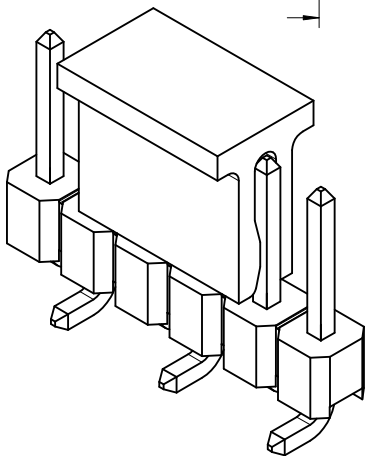
△ 9. IRREGULAR CIRCUIT CUTOFF WITHIN BREAKAWAY SECTION IS PERMISSIBLE. CUTTING OR CHIPPING OF THE MAIN BODY IS NOT ACCEPTABLE

△ 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	DESCRIPTION REV	QUALITY SYMBOLS ▽_A=0 ▽_C=0 ▽_P=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	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. 1 OF 20		
			1 PLACE	± ---	± ---							
			ANGULAR ± 3 °			MATERIAL NO. SEE TABLE						
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	F						
	-----	-----	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							
E															E						
	-----	-----	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							
	-----	-----	87898-0525	87898-0535	-----	87898-0555	5	-----	5	12.70	10.16	10.81	9.65	5.84							
D	-----	-----	87898-0526	87898-0536	-----	87898-0556	5	-----	6	12.70	10.16	10.81	9.65	5.84	D						
	-----	-----	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	C						
	-----	-----	87898-0626	87898-0636	-----	87898-0656	6	-----	6	15.24	12.70	10.81	9.65	5.84							
B																B					
A	EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSEE CHKD:PTLIM APPR:MLONG 2010/05/20 2005/03/29 2010/06/08 DESCRIPTION REV B3						QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER					A
							$\nabla_A=0$ $\nabla_F=0$ $\nabla_P=0$	4 PLACES 3 PLACES 2 PLACES 1 PLACE $\pm$ --- $\pm$ --- $\pm$ 0.2 $\pm$ --- mm INCH	DRAWN BY DATE CHECKED BY DATE APPROVED BY DATE MATERIAL NO. SEE TABLE	TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED DOCUMENT NO. SD-87898-001 SHEET NO. 3 OF 20											
							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												
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		
	-----	-----	87898-0721	87898-0731	-----	87898-0751	7	-----	1	17.78	15.24	10.81	9.65	5.84	F	
	-----	-----	87898-0722	87898-0732	-----	87898-0752	7	-----	2	17.78	15.24	10.81	9.65	5.84		
	-----	-----	87898-0724	87898-0734	-----	87898-0754	7	-----	4	17.78	15.24	10.81	9.65	5.84		
	-----	-----	87898-0725	87898-0735	-----	87898-0755	7	-----	5	17.78	15.24	10.81	9.65	5.84		
	-----	-----	87898-0726	87898-0736	-----	87898-0756	7	-----	6	17.78	15.24	10.81	9.65	5.84		
E															E	
	-----	-----	87898-0821	87898-0831	-----	87898-0851	8	-----	1	20.32	17.78	10.81	9.65	5.84		
	-----	-----	87898-0822	87898-0832	-----	87898-0852	8	-----	2	20.32	17.78	10.81	9.65	5.84		
D	-----	-----	87898-0824	87898-0834	-----	87898-0854	8	-----	4	20.32	17.78	10.81	9.65	5.84	D	
	-----	-----	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		
	-----	-----	87898-0922	87898-0932	-----	87898-0952	9	-----	2	22.86	20.32	10.81	9.65	5.84		
C	-----	-----	87898-0924	87898-0934	-----	87898-0954	9	-----	4	22.86	20.32	10.81	9.65	5.84	C	
	-----	-----	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																B
A																A
EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSEE 2010/05/20 CHKD:PTLIM 2005/03/29 APPR:MLONG 2010/06/08 DESCRIPTION REV B3							QUALITY SYMBOLS $F_A=0$ $F_G=0$ $F_P=0$	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES $\pm$ --- 3 PLACES $\pm$ --- 2 PLACES ± 0.2 1 PLACE $\pm$ --- ANGULAR $\pm 3^\circ$ DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS DIMENSION STYLE MM ONLY DRAWN BY DATE CHECKED BY DATE APPROVED BY DATE MATERIAL NO. SIZE A3	SCALE NTS DESIGN UNITS METRIC THIRD ANGLE PROJECTION TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER  MOLEX INCORPORATED DOCUMENT NO. SD-87898-001 SHEET NO. 4 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 Rev. F 2009/06/18	9	8	7	6	5	4	3	2	1							

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E																																																																																																			
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D	-----	-----	87898-1221	87898-1231	-----	87898-1251	12	-----	1	30.48	27.94	10.81	9.65	5.84																																																																																					
	-----	-----	87898-1222	87898-1232	-----	87898-1252	12	-----	2	30.48	27.94	10.81	9.65	5.84																																																																																					
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C	-----	-----	87898-1226	87898-1236	-----	87898-1256	12	-----	6	30.48	27.94	10.81	9.65	5.84																																																																																					
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<table><tr><td rowspan="10">EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSE 2010/05/20 CHKD:PTLM 2005/03/29 APPR:MLONG 2010/06/08 B3</td><td rowspan="10">REV DESCRIPTION</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></td><td></td><td colspan="2">MM ONLY</td><td>NTS</td><td>METRIC</td><td colspan="2"></td></tr><tr><td></td><td>mm</td><td>INCH</td><td>DRAWN BY</td><td>DATE</td><td colspan="2">TITLE</td></tr><tr><td>4 PLACES</td><td>± ---</td><td>± ---</td><td>YLQIAO</td><td>2005/03/14</td><td colspan="2">CUSTOM HEADER</td></tr><tr><td>3 PLACES</td><td>± ---</td><td>± ---</td><td>CHECKED BY</td><td>DATE</td><td colspan="2">2.54MM PITCH SINGLE ROW</td></tr><tr><td>2 PLACES</td><td>± 0.2</td><td>± ---</td><td>PTLIM</td><td>2005/03/29</td><td colspan="2">SINGLE WAFER SMT HEADER</td></tr><tr><td>1 PLACE</td><td>± ---</td><td>± ---</td><td>APPROVED BY</td><td>DATE</td><td colspan="2"></td></tr><tr><td colspan="3">ANGULAR ± 3 °</td><td>MLONG</td><td>2010/03/10</td><td colspan="2"></td></tr><tr><td colspan="3">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td><td colspan="2">MATERIAL NO.</td><td colspan="2">SEE TABLE</td><td colspan="2">DOCUMENT NO.</td><td colspan="2">SD-87898-001</td></tr><tr><td colspan="3"></td><td colspan="2">SIZE A3</td><td colspan="5">THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION</td><td colspan="2">SHEET NO. 5 OF 20</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 B3	REV DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		 			MM ONLY		NTS	METRIC				mm	INCH	DRAWN BY	DATE	TITLE		4 PLACES	± ---	± ---	YLQIAO	2005/03/14	CUSTOM HEADER		3 PLACES	± ---	± ---	CHECKED BY	DATE	2.54MM PITCH SINGLE ROW		2 PLACES	± 0.2	± ---	PTLIM	2005/03/29	SINGLE WAFER SMT HEADER		1 PLACE	± ---	± ---	APPROVED BY	DATE			ANGULAR ± 3 °			MLONG	2010/03/10			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			MATERIAL NO.		SEE TABLE		DOCUMENT NO.		SD-87898-001					SIZE A3		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					SHEET NO. 5 OF 20	
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	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												
	-----	-----	87898-1321	87898-1331	-----	87898-1351	13	-----	1	33.02	30.48	10.81	9.65	5.84												
	-----	-----	87898-1322	87898-1332	-----	87898-1352	13	-----	2	33.02	30.48	10.81	9.65	5.84												
	-----	-----	87898-1324	87898-1334	-----	87898-1354	13	-----	4	33.02	30.48	10.81	9.65	5.84												
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E																										
	-----	-----	87898-1421	87898-1431	-----	87898-1451	14	-----	1	35.56	33.02	10.81	9.65	5.84												
	-----	-----	87898-1422	87898-1432	-----	87898-1452	14	-----	2	35.56	33.02	10.81	9.65	5.84												
	-----	-----	87898-1424	87898-1434	-----	87898-1454	14	-----	4	35.56	33.02	10.81	9.65	5.84												
	-----	-----	87898-1425	87898-1435	-----	87898-1455	14	-----	5	35.56	33.02	10.81	9.65	5.84												
	-----	-----	87898-1426	87898-1436	-----	87898-1456	14	-----	6	35.56	33.02	10.81	9.65	5.84												
D																										
	-----	-----	87898-1521	87898-1531	-----	87898-1551	15	-----	1	38.10	35.56	10.81	9.65	5.84												
	-----	-----	87898-1522	87898-1532	-----	87898-1552	15	-----	2	38.10	35.56	10.81	9.65	5.84												
	-----	-----	87898-1524	87898-1534	-----	87898-1554	15	-----	4	38.10	35.56	10.81	9.65	5.84												
	-----	-----	87898-1525	87898-1535	-----	87898-1555	15	-----	5	38.10	35.56	10.81	9.65	5.84												
	-----	-----	87898-1526	87898-1536	-----	87898-1556	15	-----	6	38.10	35.56	10.81	9.65	5.84												
C																										
B																										
A																										
											EWR#1228, +0209 EC NO: S2010-0966 2010/05/20 DRWN:ATSEE 2005/03/29 CHKD:PTLIM APPR:MLONG					QUALITY SYMBOLS F _A =0 F _G =0 F _P =0	GENERAL TOLERANCES (UNLESS SPECIFIED)			DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
											DESCRIPTION REV	mm		INCH			DRAWN BY YLOIAO		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 ± ---		± ---			2 PLACES ± 0.2		± ---		APPROVED BY MLONG		DATE 2010/03/10		molex MOLEX INCORPORATED	
											2 PLACES ± ---		± ---		1 PLACE ± ---		± ---		ANGULAR ± 3 °		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-87898-001		SHEET NO. 6 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											
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							
	-----	-----	87898-1621	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							
	-----	-----	87898-1722	87898-1732	-----	87898-1752	17	-----	2	43.18	40.64	10.81	9.65	5.84							
D	-----	-----	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							
	-----	-----	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							
C	-----	-----	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																					
											REV	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
														F=0 F=0 F=0	mm		INCH		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	APPROVED BY	DATE	MOLEX	DOCUMENT NO.	SHEET NO.	
											2 PLACES	± 0.2	± ---	PTLIM	2005/03/29						
											1 PLACE	± ---	± ---	MLONG	2010/03/10						
											ANGULAR ± 3 °		MATERIAL NO.		SEE TABLE		SD-87898-001		7 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						
ib_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																																																																																																		
	-----	-----	87898-1921	87898-1931	-----	87898-1951	19	-----	1	48.26	45.72	10.81	9.65	5.84																																																																																																		
	-----	-----	87898-1922	87898-1932	-----	87898-1952	19	-----	2	48.26	45.72	10.81	9.65	5.84																																																																																																		
	-----	-----	87898-1924	87898-1934	-----	87898-1954	19	-----	4	48.26	45.72	10.81	9.65	5.84																																																																																																		
	-----	-----	87898-1925	87898-1935	-----	87898-1955	19	-----	5	48.26	45.72	10.81	9.65	5.84																																																																																																		
	-----	-----	87898-1926	87898-1936	-----	87898-1956	19	-----	6	48.26	45.72	10.81	9.65	5.84																																																																																																		
E																																																																																																																
	-----	-----	87898-2021	87898-2031	-----	87898-2051	20	-----	1	50.80	48.26	10.81	9.65	5.84																																																																																																		
	-----	-----	87898-2022	87898-2032	-----	87898-2052	20	-----	2	50.80	48.26	10.81	9.65	5.84																																																																																																		
	-----	-----	87898-2024	87898-2034	-----	87898-2054	20	-----	4	50.80	48.26	10.81	9.65	5.84																																																																																																		
	-----	-----	87898-2025	87898-2035	-----	87898-2055	20	-----	5	50.80	48.26	10.81	9.65	5.84																																																																																																		
	-----	-----	87898-2026	87898-2036	-----	87898-2056	20	-----	6	50.80	48.26	10.81	9.65	5.84																																																																																																		
D	-----	-----	87898-2121	87898-2131	-----	87898-2151	21	-----	1	53.34	50.80	10.81	9.65	5.84																																																																																																		
	-----	-----	87898-2122	87898-2132	-----	87898-2152	21	-----	2	53.34	50.80	10.81	9.65	5.84																																																																																																		
	-----	-----	87898-2124	87898-2134	-----	87898-2154	21	-----	4	53.34	50.80	10.81	9.65	5.84																																																																																																		
	-----	-----	87898-2125	87898-2135	-----	87898-2155	21	-----	5	53.34	50.80	10.81	9.65	5.84																																																																																																		
C	-----	-----	87898-2126	87898-2136	-----	87898-2156	21	-----	6	53.34	50.80	10.81	9.65	5.84																																																																																																		
B																																																																																																																
A																																																																																																																
<table><tr><td rowspan="4">EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSEE 2010/05/20 CHKD:PTLIM 2005/03/29 APPR:MLONG 2010/06/08</td><td rowspan="4">DESCRIPTION</td><td rowspan="4">REV</td><td rowspan="4">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></td><td></td><td>DRAWN BY</td><td>DATE</td><td colspan="4">TITLE</td></tr><tr><td>$F_A=0$</td><td>4 PLACES</td><td>± ---</td><td>± ---</td><td>YLOIAO</td><td>2005/03/14</td><td colspan="4">CUSTOM HEADER</td></tr><tr><td>$F_G=0$</td><td>3 PLACES</td><td>± ---</td><td>± ---</td><td>CHECKED BY</td><td>DATE</td><td colspan="4">2.54MM PITCH SINGLE ROW</td></tr><tr><td>$F_P=0$</td><td>2 PLACES</td><td>± 0.2</td><td>± ---</td><td>PTLIM</td><td>2005/03/29</td><td colspan="4">SINGLE WAFER SMT HEADER</td></tr><tr><td></td><td>1 PLACE</td><td>± ---</td><td>± ---</td><td>APPROVED BY</td><td>DATE</td><td colspan="4">MOLEX INCORPORATED</td></tr><tr><td colspan="4"></td><td colspan="2">ANGULAR ± 3 °</td><td>MLONG</td><td>2010/03/10</td><td colspan="4"></td></tr><tr><td colspan="4"></td><td colspan="2">DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td><td colspan="2">MATERIAL NO. SEE TABLE</td><td colspan="2">DOCUMENT NO. SD-87898-001</td><td colspan="2">SHEET NO. 8 OF 20</td></tr><tr><td colspan="4"></td><td colspan="2"></td><td>SIZE A3</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>															EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSEE 2010/05/20 CHKD:PTLIM 2005/03/29 APPR:MLONG 2010/06/08	DESCRIPTION	REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION				DRAWN BY	DATE	TITLE				$F_A=0$	4 PLACES	± ---	± ---	YLOIAO	2005/03/14	CUSTOM HEADER				$F_G=0$	3 PLACES	± ---	± ---	CHECKED BY	DATE	2.54MM PITCH SINGLE ROW				$F_P=0$	2 PLACES	± 0.2	± ---	PTLIM	2005/03/29	SINGLE WAFER SMT HEADER					1 PLACE	± ---	± ---	APPROVED BY	DATE	MOLEX INCORPORATED								ANGULAR ± 3 °		MLONG	2010/03/10									DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-87898-001		SHEET NO. 8 OF 20								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 CHKD:PTLIM 2005/03/29 APPR:MLONG 2010/06/08	DESCRIPTION	REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION																																																																																																						
						DRAWN BY	DATE	TITLE																																																																																																								
				$F_A=0$	4 PLACES	± ---	± ---	YLOIAO	2005/03/14	CUSTOM HEADER																																																																																																						
				$F_G=0$	3 PLACES	± ---	± ---	CHECKED BY	DATE	2.54MM PITCH SINGLE ROW																																																																																																						
$F_P=0$	2 PLACES	± 0.2	± ---	PTLIM	2005/03/29	SINGLE WAFER SMT HEADER																																																																																																										
	1 PLACE	± ---	± ---	APPROVED BY	DATE	MOLEX INCORPORATED																																																																																																										
				ANGULAR ± 3 °		MLONG	2010/03/10																																																																																																									
				DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO. SEE TABLE		DOCUMENT NO. SD-87898-001		SHEET NO. 8 OF 20																																																																																																						
						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																																																																																																							

[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											
	-----	-----	87898-2521	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									
D	-----	-----	87898-2626	87898-2636	-----	-----	26	----	6	66.04	63.50	10.81	9.65	5.84								
-----	-----	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									
C	-----	-----	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									
B																						
A																						

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	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																																											
		-----	-----	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																																											
	-----	-----	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="5">EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSE 2010/05/20 CHKD:PTLM 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. 12 OF 20</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 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. 12 OF 20
EWR#1228, +0209 EC NO: S2010-0966 DRWN:ATSE 2010/05/20 CHKD:PTLM 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. 12 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																																							
	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	-----	-----	87898-3421	87898-3431	-----	-----	34	-----	1	86.36	83.82	10.81	9.65	5.84	F																																		
	-----	-----	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															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																																			
D	-----	-----	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																																			
C	-----	-----	87898-3625	87898-3635	-----	-----	36	-----	5	91.44	88.90	10.81	9.65	5.84	C																																		
	-----	-----	87898-3626	87898-3636	-----	-----	36	-----	6	91.44	88.90	10.81	9.65	5.84																																			
B															B																																		
A															A																																		
<table><tr><td rowspan="5">EWR#1228, +0209 EC NO: S7010-0966 DRWN:ATSEE 2010/05/20 CHKD:PTLIM 2005/03/29 APPR:MLONG 2010/06/08 B3</td><td rowspan="5">REV</td><td rowspan="5">QUALITY SYMBOLS ▽F=0 ▽F=0 ▽F=0</td><td rowspan="5">GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS</td><td colspan="2">DIMENSION STYLE MM ONLY</td><td>SCALE NTS</td><td>DESIGN UNITS METRIC</td><td rowspan="5"> THIRD ANGLE PROJECTION</td><td colspan="5" rowspan="5">CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED SD-87898-001 SHEET NO. 13 OF 20</td></tr><tr><td colspan="2">DRAWN BY DATE YLQIAO 2005/03/14</td><td>TITLE</td></tr><tr><td colspan="2">CHECKED BY DATE PTLIM 2005/03/29</td><td></td></tr><tr><td colspan="2">APPROVED BY DATE MLONG 2010/03/10</td><td></td></tr><tr><td colspan="2">MATERIAL NO.</td><td>DOCUMENT NO.</td></tr><tr><td colspan="2">SIZE A3</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>															EWR#1228, +0209 EC NO: S7010-0966 DRWN:ATSEE 2010/05/20 CHKD:PTLIM 2005/03/29 APPR:MLONG 2010/06/08 B3	REV	QUALITY SYMBOLS ▽F=0 ▽F=0 ▽F=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED SD-87898-001 SHEET NO. 13 OF 20					DRAWN BY DATE YLQIAO 2005/03/14		TITLE	CHECKED BY DATE PTLIM 2005/03/29			APPROVED BY DATE MLONG 2010/03/10			MATERIAL NO.		DOCUMENT 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: S7010-0966 DRWN:ATSEE 2010/05/20 CHKD:PTLIM 2005/03/29 APPR:MLONG 2010/06/08 B3	REV	QUALITY SYMBOLS ▽F=0 ▽F=0 ▽F=0	GENERAL TOLERANCES (UNLESS SPECIFIED) mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± --- ANGULAR ± 3 ° DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER MOLEX INCORPORATED SD-87898-001 SHEET NO. 13 OF 20																																								
				DRAWN BY DATE YLQIAO 2005/03/14		TITLE																																											
				CHECKED BY DATE PTLIM 2005/03/29																																													
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				MATERIAL NO.		DOCUMENT 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																																								

	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
		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: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	
		 			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. 14 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. SEE TABLE				
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					

tb_frame_A3_P_AM_T
Rev. F 2009/06/18

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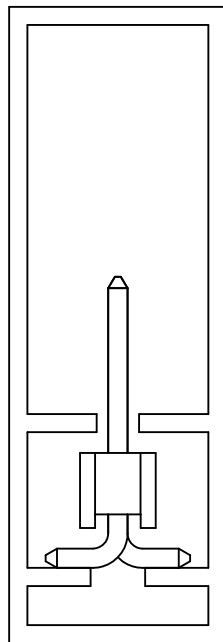
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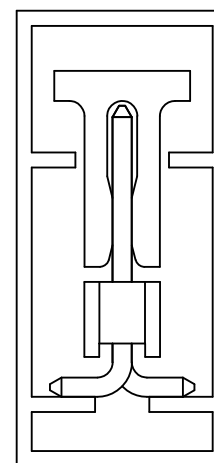
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1

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 F=0 F=0 F=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.					DOCUMENT NO.	SHEET NO. 16 OF 20
			1 PLACE	± ---	± ---	SEE TABLE					SD-87898-001	
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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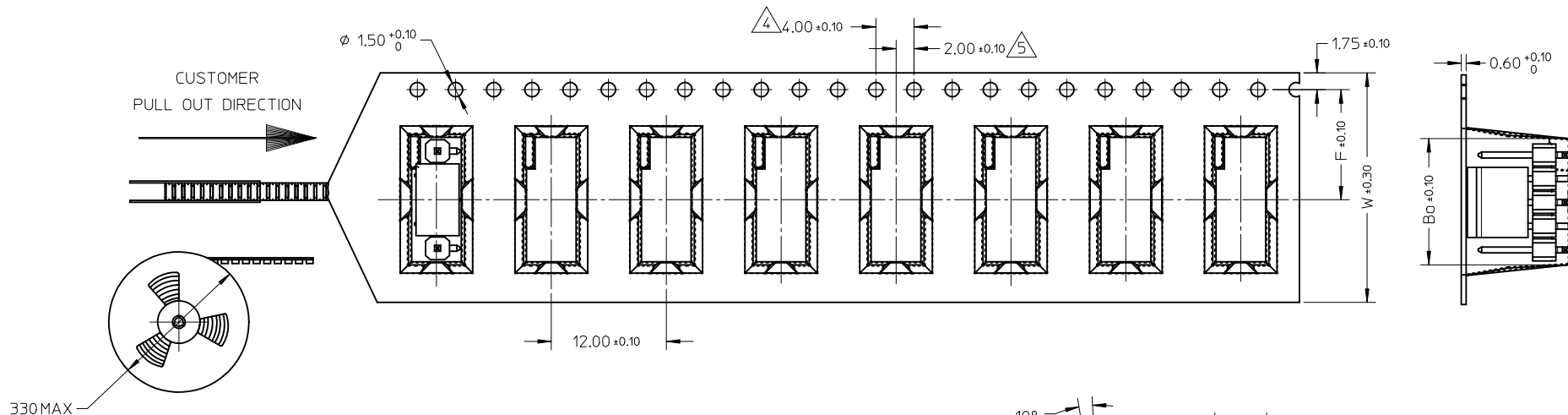
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2

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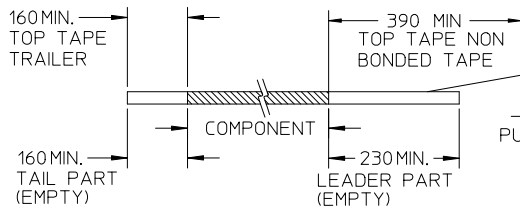
10 9 8 7 6 5 4 3 2 1

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

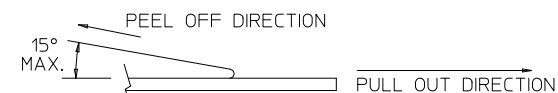


NOTES:

1. LEADER AND TRAILER TAPE



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

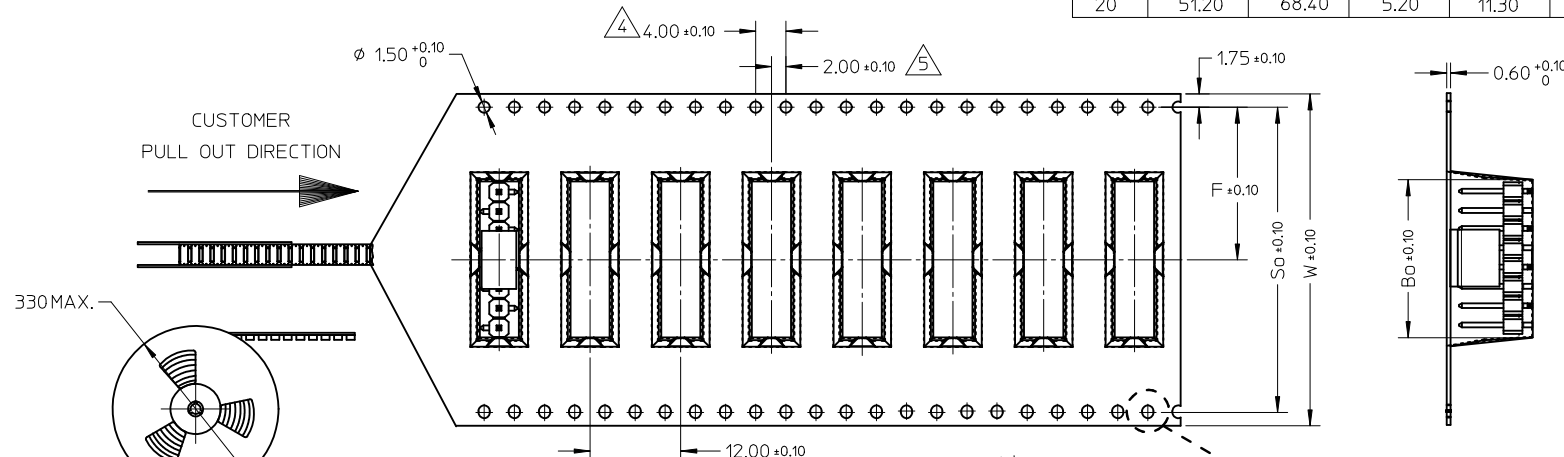


3. MATERIAL: BLACK P.S CONDUCTIVE, BLACK
4. MEASURED FROM CENTRELINE OF SPROCKET HOLE TO CENTRELINE OF SPOCKET
5. CUMULATIVE TOLERANCE OF 10 SPROCKET HOLE IS $\pm 0.20\text{mm}$
6. A0 AND B0 ARE MEASURED FROM ABOVE POCKET BASE 0.30mm
7. TAPE AND REEL SPECIFICATION IS AS PER EIA-481.
8. TAPE AND REEL 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)**

EWR#1228, +0209 EC NO: S2010-0966 DRAWN:ATSEE CHKD:PTLIM B3	2010/05/20 2005/03/29 2010/06/08	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY		SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION		
			 A=0		mm	INCH	DRAWN BY YLO1A0	DATE 2005/03/14	TITLE CUSTOM HEADER 2.54MM PITCH SINGLE ROW SINGLE WAFER SMT HEADER			
			 C=0		4 PLACES	± --- ± ---						
			 P=0		3 PLACES	± --- ± ---			APPROVED BY MLONG	DATE 2010/03/10	 MOLEX INCORPORATED	
					2 PLACES	± 0.2 ± ---			MATERIAL NO.			
				1 PLACE	± --- ± ---			SD-87898-001		18 OF 20		
				ANGULAR ± 3 °		SEE TABLE						
				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						

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:

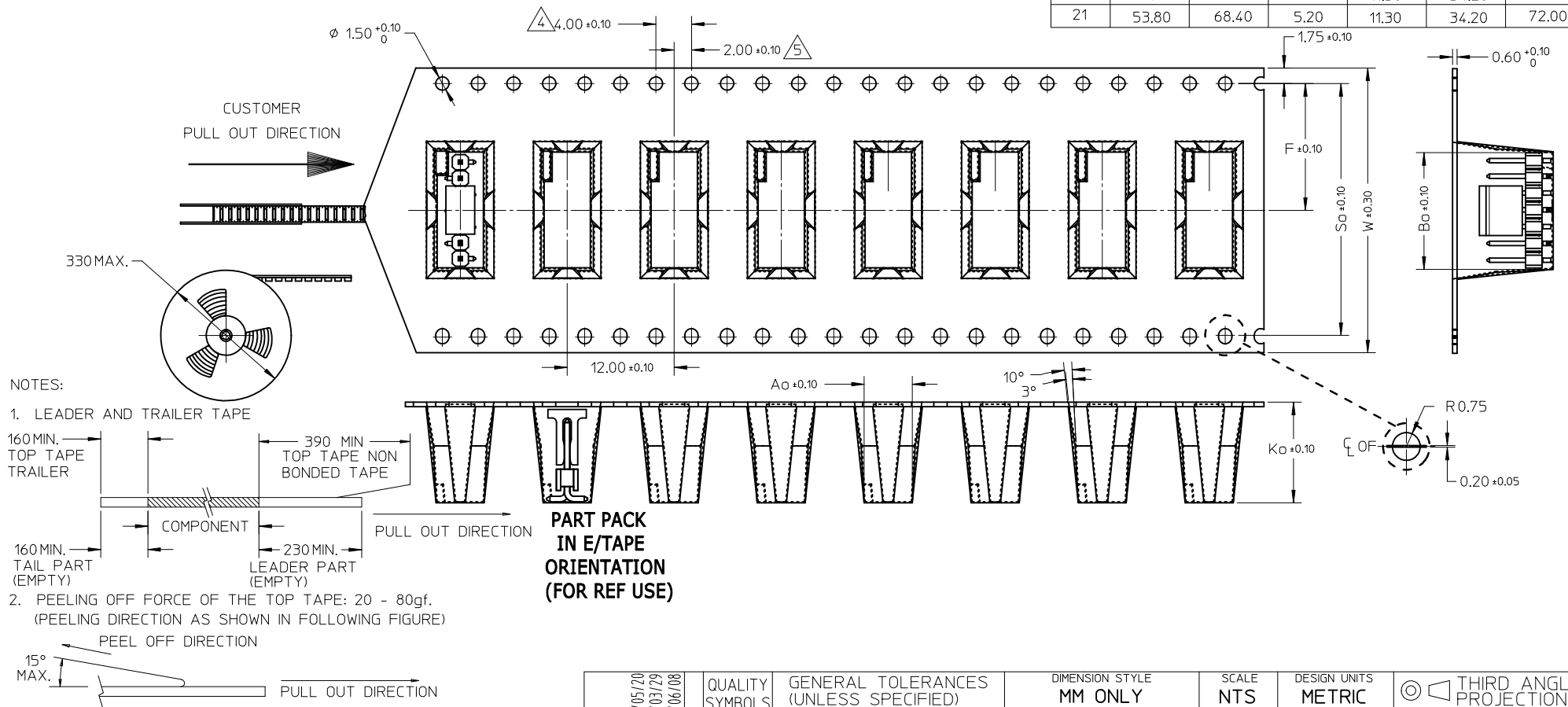
- LEADER AND TRAILER TAPE
160 MIN. TOP TAPE TRAILER
390 MIN. TOP TAPE NON BONDED TAPE
160 MIN. TAIL PART (EMPTY)
230 MIN. LEADER PART (EMPTY)
PULL OUT DIRECTION
- PEELING OFF FORCE OF THE TOP TAPE: 20 - 80gf.
(PEELING DIRECTION AS SHOWN IN FOLLOWING FIGURE)
PEEL OFF DIRECTION
15° MAX.

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

- 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.

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

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 EC NO: SZ010-0966 DRAWN:ATSEE CHKD:PTLIM APPR:MLONG	DESCRIPTION	QUALITY SYMBOLS F_A=0 F_C=0 F_P=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	DATE	MOLEX MOLEX INCORPORATED				
			2 PLACES	± 0.2	± ---	MLONG	2010/03/10					
			1 PLACE	± ---	± ---	MATERIAL NO.	DOCUMENT NO.	SHEET NO.				
REV			ANGULAR ± 3 °		SEE TABLE		SD-87898-001					20 OF 20
			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							