

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

**Part Number:** [0878912818](#)  
**Status:** **Active**  
**Overview:** [kk](#)  
**Description:** 2.54mm (.100") Pitch KK® Header, Through Hole, Breakaway, Vertical, 28 Circuits, 0.38µm (15µ") Gold (Au) Plating, with Cap, Tape on Reel Packaging, Lead-free

**Documents:**

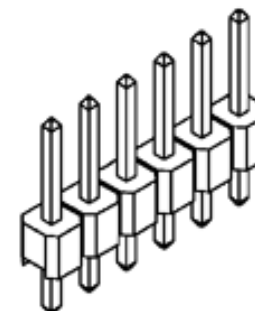
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Product Specification PS-87920-019 \(PDF\)](#)

**General**

Product Family	PCB Headers
Series	<a href="#">87891</a>
Application	Board-to-Board, Wire-to-Board
Comments	With Cap
Overview	<a href="#">kk</a>
Product Name	KK®

**Physical**

Breakaway	Yes
Circuits (Loaded)	28
Circuits (maximum)	28
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
Mated Height (in)	0.520 In
Mated Height (mm)	13.21 mm
Material - Metal	Copper Alloy
Material - Plating Mating	Gold
Material - Plating Termination	Nickel
Material - Resin	Nylon
Number of Rows	1
Orientation	Vertical
PC Tail Length (in)	0.059 In
PC Tail Length (mm)	1.50 mm
PCB Locator	No
PCB Retention	None
PCB Thickness Recommended (in)	0.063 In
PCB Thickness Recommended (mm)	1.60 mm
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
Plating min: Mating (µin)	15
Plating min: Mating (µm)	0.38
Plating min: Termination (µin)	75
Plating min: Termination (µm)	1.90
Polarized to Mating Part	No
Polarized to PCB	No
Shrouded	No
Stackable	No
Temperature Range - Operating	-55°C to +105°C



*image - Reference only*

*Series*

**EU RoHS**

**ELV and RoHS  
Compliant**  
**REACH SVHC**  
 Not Reviewed  
**Halogen-Free  
Status**

**China RoHS**



**Need more information on product  
environmental compliance?**

Email [productcompliance@molex.com](mailto:productcompliance@molex.com)  
 For a multiple part number RoHS Certificate of Compliance, [click here](#)

Please visit the [Contact Us](#) section for any non-product compliance questions.

**Search Parts in this Series**

[87891Series](#)

**Mates With**

KK® PCB Receptacles [4455](#). SL™ IDT  
 Housings [70430](#) , [7720](#), [70400](#). C-Grid®  
 PCB Receptacles [90147](#), [90148](#)

Termination Interface: Style Through Hole

**Electrical**

Current - Maximum per Contact 3A  
Voltage - Maximum 250V

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 12  
Lead-free Process Capability Wave Capable (TH only)  
Max. Cycles at Max. Process Temperature 1  
Process Temperature max. C 260

**Material Info**

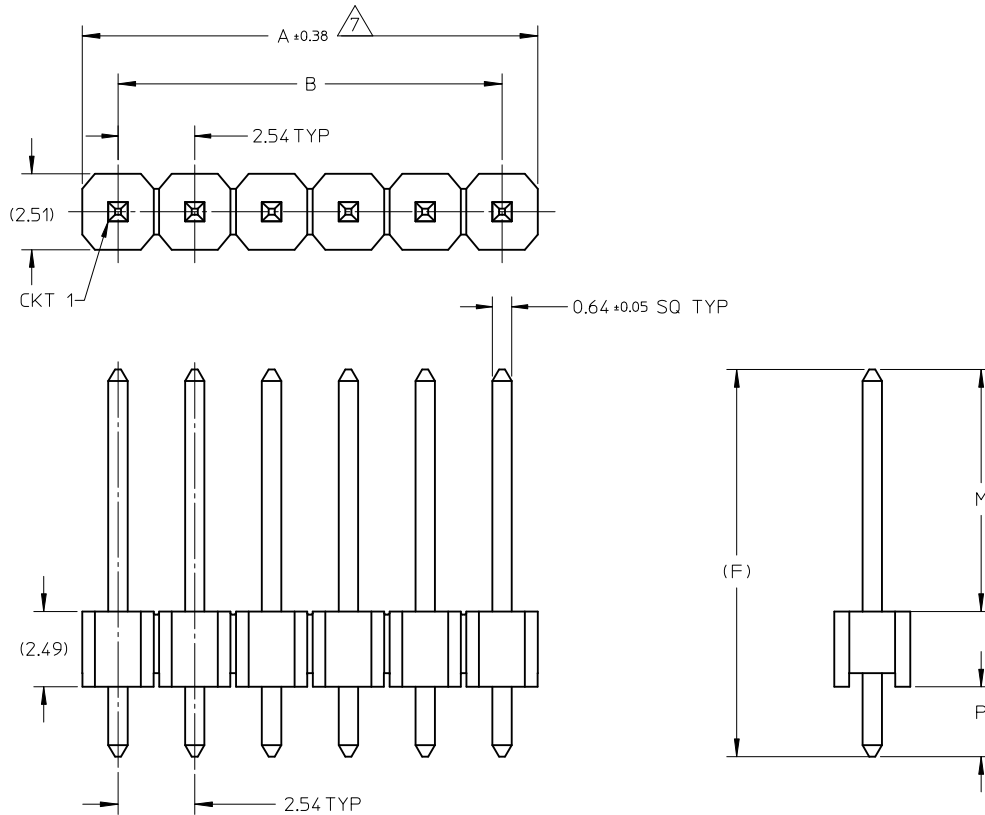
**Reference - Drawing Numbers**

Packaging Specification PK-89990-489  
Product Specification PS-87920-019  
Sales Drawing SD-87891-001

This document was generated on 05/25/2010

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ASSEMBLY WITHOUT CAP



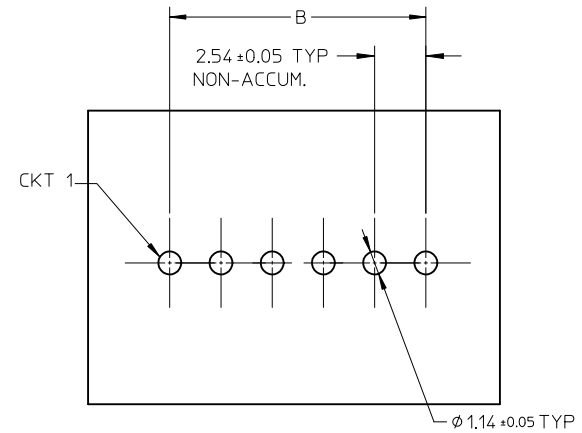
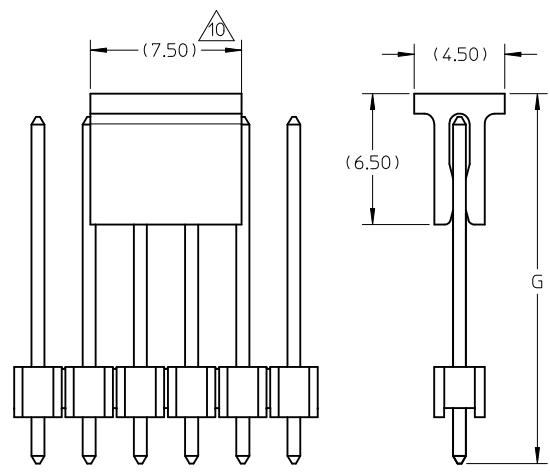
NOTES

1. MATERIAL:
  - HSG: 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.
  - (3) 0.38µm MIN. GOLD PLATE ON CONTACT AND  
2.00µm MIN. TIN ON SOLDER TAIL OVER  
1.25µm MIN. NICKEL OVERALL.
  - (4) 0.75µm MIN. GOLD PLATE ON CONTACT AND  
2.00µm MIN. TIN ON SOLDER TAIL OVER  
1.25µm MIN. NICKEL OVERALL.
  - (5) 2.50µm MIN TIN OVERALL  
1.25µm MIN NICKEL OVERALL
3. PRODUCT SPECIFICATION: PS-87920-019
4. PACKAGING TYPE: SEE TABLE
5. WAFER TO BE FLAT WITHIN 0.003 mm/mm
6. RECOMMENDED PCB THICKNESS IS 1.60mm±0.10
7. IRREGULAR CIRCUIT CUTOFF WITHIN BREAKAWAY SECTION IS PERMISSIBLE. CUTTING OR CHIPPING OF THE MAIN BODY IS NOT ACCEPTABLE
8. THE ABOVE CKT 6 IS FOR ILLUSTRATION PURPOSE ONLY
9. PACKAGING SPECIFICATION:
  - TRAY: PK-89990-489
  - BULK: PK-89990-491
10. CAP TO BE PLACED AT THE CENTER OF THE CONNECTOR.

CN-0072.878910751/0851 EC NO: S2010-0506 DRWN:SKANG 2009/12/16 CHKD:ATSEE 2010/04/26 APPR:MLONG 2010/04/27	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE MM ONLY	SCALE NTS	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION																															
	$F_A=0$ $F_C=0$ $F_P=0$	<table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.2</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.2	± ---	1 PLACE	± ---	± ---	<table border="1"> <thead> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> </thead> <tbody> <tr> <td>4 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>3 PLACES</td> <td>± ---</td> <td>± ---</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.2</td> <td>± ---</td> </tr> <tr> <td>1 PLACE</td> <td>± ---</td> <td>± ---</td> </tr> </tbody> </table>		mm	INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.2	± ---	1 PLACE	± ---	± ---	DRAWN BY: KCHO DATE: 2004/03/24 CHECKED BY: PTLIM DATE: 2004/04/02 APPROVED BY: SCLOW DATE: 2004/04/08	TITLE	CUSTOM HEADER 2.54MM PITCH, SINGLE ROW SINGLE WAFER, T/H HEADER MOLEX INCORPORATED SD-87891-001	SHEET NO. 1 OF 3
		mm	INCH																																		
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DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-87891-001																																		
REV		SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																																		

CKT SIZE	DIMENSION	
	A	B
02	5.08	2.54
03	7.62	5.08
04	10.16	7.62
05	12.70	10.16
06	15.24	12.70
07	17.78	15.24
08	20.32	17.78
09	22.86	20.32
10	25.40	22.86
11	27.94	25.40
12	30.48	27.94
13	33.02	30.48
14	35.56	33.02
15	38.10	35.56
16	40.64	38.10
17	43.18	40.64
18	45.72	43.18
19	48.26	45.72
20	50.80	48.26
21	53.34	50.80
22	55.88	53.34
23	58.42	55.88
24	60.96	58.42
25	63.50	60.96
26	66.04	63.50
27	68.58	66.04
28	71.12	68.58
29	73.66	71.12
30	76.20	73.66
31	78.74	76.20
32	81.28	78.74
33	83.82	81.28
34	86.36	83.82
35	88.90	86.36
36	91.44	88.90
37	93.98	91.44
38	96.52	93.98
39	99.06	96.52
40	101.60	99.06

ASSEMBLY WITH CAP



RECOMMENDED P.C.B. HOLE LAYOUT

ASSY W/CAP IN T&R	PART NO. IN TRAY PACKAGING	PART NO. IN BULK PACKAGING	CKT SIZE	VOID PIN	KINK PIN	G	DIMENSION			PLATING TYPE
							OAL	MATING END	SOLDER TAIL	
							F	M	P	
-	87891-0200	-	02	-	-	-	11.76	6.09	3.18	5
-	87891-0207	-	02	-	-	-	9.80	4.00	3.31	5
-	87891-0208	-	02	-	-	-	7.49	4.00	1.00	2
-	87891-0209	-	02	-	-	-	10.80	5.08	3.23	5
-	87891-0210	-	02	-	-	-	31.00	25.54	2.97	5
-	87891-0402	-	04	2	-	-	10.80	5.89	2.41	5
-	87891-0411	-	04	-	-	-	10.09	4.00	3.60	5
-	87891-0407	-	04	-	-	-	9.80	4.00	3.31	5
-	87891-0408	-	04	-	-	-	31.00	25.54	2.97	5
-	87891-0500	-	05	-	-	-	11.94	6.10	3.30	5
-	87891-0501	-	05	-	-	-	13.62	8.08	3.05	5
-	87891-0502	-	05	2	-	-	10.80	5.89	2.41	5
-	87891-0503	-	05	2	-	-	45.00	13.51	29.00	5
-	87891-0504	-	05	2	-	-	45.00	13.51	29.00	3
-	87891-0507	-	05	4	-	-	10.92	5.84	2.59	3
-	87891-0516	-	05	-	-	-	32.49	16.00	14.00	4
-	87891-0602	-	06	-	-	-	12.80	8.00	2.31	5
-	87891-0700	-	07	-	-	-	11.94	6.10	3.30	5
-	87891-0751	-	07	-	-	-	13.74	8.00	3.25	5
-	87891-0851	-	08	-	-	-	13.74	8.00	3.25	5
-	-	87891-2601	26	4, 7, 17	-	-	11.13	5.59	3.05	3
87891-1817	-	-	18	-	-	18.36	17.20	13.21	1.50	5
87891-1818	-	-	18	-	-	18.36	17.20	13.21	1.50	3
87891-2817	-	-	28	-	-	18.36	17.20	13.21	1.50	5
87891-2818	-	-	28	-	-	18.36	17.20	13.21	1.50	3

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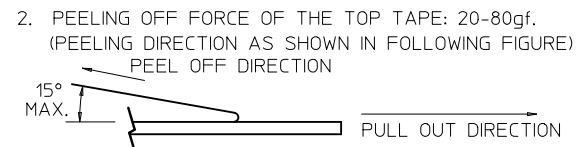
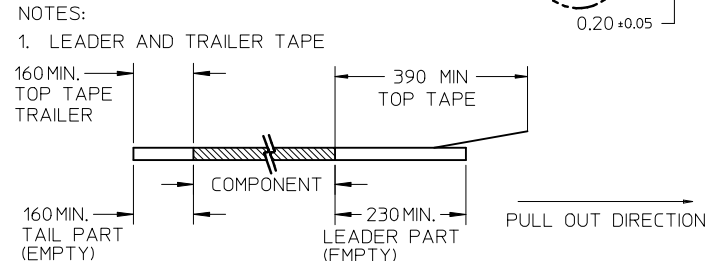
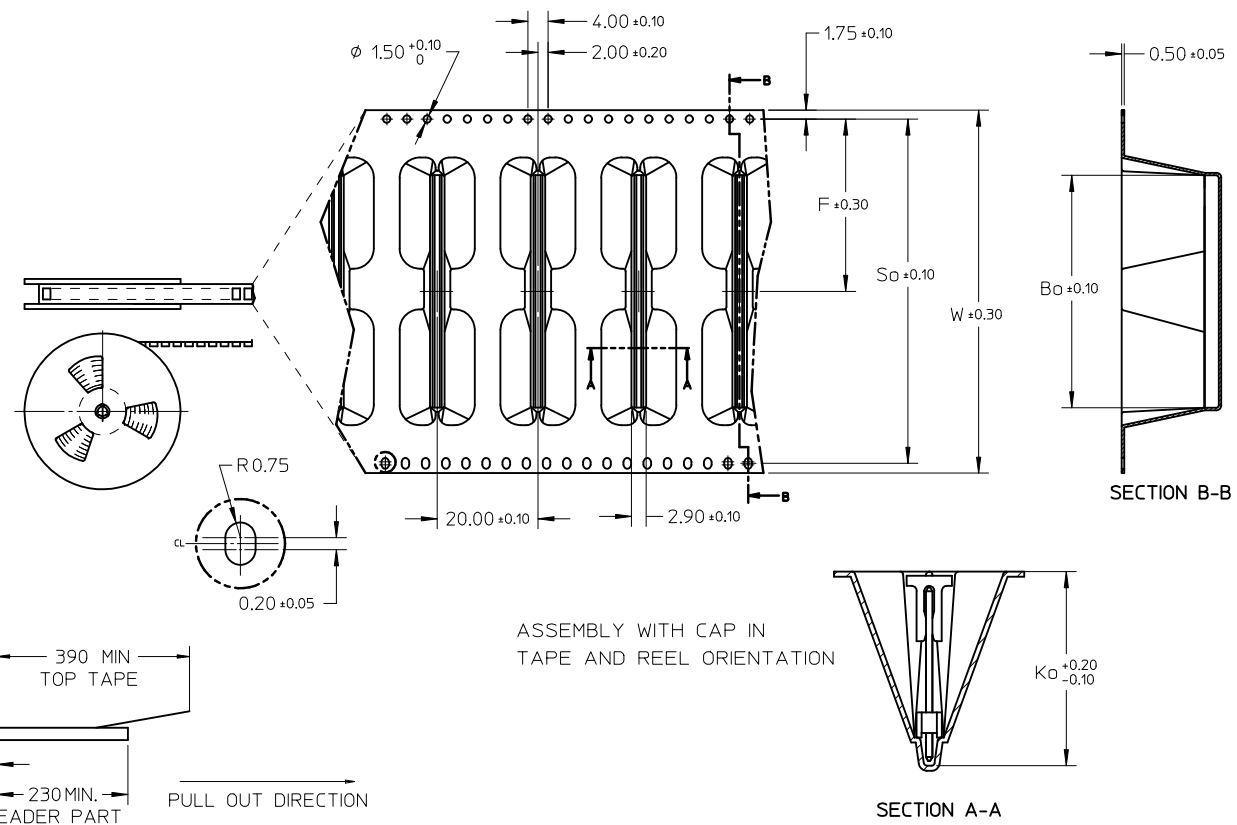
QUALITY SYMBOLS	DESCRIPTION
$\nabla_A = 0$	
$\nabla_C = 0$	
$\nabla_P = 0$	

GENERAL TOLERANCES (UNLESS SPECIFIED)	
mm	INCH
4 PLACES ± ---	± ---
3 PLACES ± ---	± ---
2 PLACES ± 0.2	± ---
1 PLACE ± ---	± ---
ANGULAR ± 3 °	

DIMENSION STYLE	
MM ONLY	
DRAWN BY	DATE
KCHO	2004/03/24
CHECKED BY	DATE
PTL IM	2004/04/02
APPROVED BY	DATE
SCLOW	2004/04/08
MATERIAL NO.	
SEE TABLE	

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
NTS	METRIC	
TITLE		
CUSTOM HEADER		
2.54MM PITCH, SINGLE ROW		
SINGLE WAFER, T/H HEADER		
MOLEX INCORPORATED		
MATERIAL NO.	DOCUMENT NO.	SHEET NO.
	SD-87891-001	2 OF 3
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CKT	F	So	W	Bo	Ko
18	34.20	68.40	72.00	46.12	19.25
28	42.20	84.40	88.00	71.52	19.25



- PACKAGING STANDARD IS AS PER EIA-481.
- TAPE & REEL QUANTITY = 230 PCS/REEL
- THE TAPE IS TREATED FOR ANTI-STATIC.

ASSEMBLY WITH CAP IN TAPE AND REEL ORIENTATION

CN-0072.878910751/0851 EC NO: S2010-0506 DRWN:SKANG 2009/12/16 CHKD:ATSEE 2010/04/26 APPR:MLONG 2010/04/27	DESCRIPTION REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
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			4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± 0.2 ± --- 1 PLACE ± --- ± ---	DRAWN BY DATE KCHO 2004/03/24	TITLE CUSTOM HEADER 2.54MM PITCH, SINGLE ROW SINGLE WAFER, T/H HEADER			
			ANGULAR ± 3 °	CHECKED BY DATE PTL IM 2004/04/02	APPROVED BY DATE SCLOW 2004/04/08			
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