

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

**Part Number:** [0010081081](#)  
**Status:** **Active**  
**Overview:** [kk](#)  
**Description:** 5.08mm (.200") Pitch KK® Header, Vertical, Round Pin, 8 Circuits, Tin (Sn) Plating, Pin Length 28.58mm (1.125")

**Documents:**

[3D Model](#) [Product Specification PS-99020-0087 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

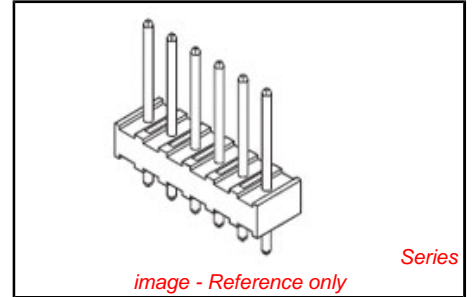
CSA LR19980  
 UL E29179

**General**

Product Family PCB Headers  
 Series 3003  
 Application Board-to-Board, Wire-to-Board  
 Overview [kk](#)  
 Product Name KK®

**Physical**

Breakaway No  
 Circuits (Loaded) 8  
 Circuits (maximum) 8  
 Color - Resin Natural  
 Durability (mating cycles max) 25  
 First Mate / Last Break No  
 Flammability 94V-2  
 Glow-Wire Compliant No  
 Guide to Mating Part No  
 Keying to Mating Part None  
 Lock to Mating Part None  
 Material - Metal Brass  
 Material - Plating Mating Tin  
 Material - Plating Termination Tin  
 Material - Resin Nylon  
 Number of Rows 1  
 Orientation Vertical  
 PC Tail Length (in) 0.155 In  
 PC Tail Length (mm) 3.94 mm  
 PCB Locator No  
 PCB Retention None  
 PCB Thickness Recommended (in) 0.062 In  
 PCB Thickness Recommended (mm) 1.60 mm  
 Packaging Type Bag  
 Pitch - Mating Interface (in) 0.200 In  
 Pitch - Mating Interface (mm) 5.08 mm  
 Pitch - Term. Interface (in) 0.200 In  
 Pitch - Term. Interface (mm) 5.08 mm  
 Plating min: Mating (µin) 200  
 Plating min: Mating (µm) 5  
 Plating min: Termination (µin) 200  
 Plating min: Termination (µm) 5  
 Polarized to Mating Part No  
 Polarized to PCB No



**EU RoHS**

**ELV and RoHS Compliant**

**REACH SVHC**

Not Reviewed

**Halogen-Free**

**Status**

**Not Reviewed**

**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.

**China RoHS**



**Search Parts in this Series**

[3003Series](#)

**Mates With**

KK® Crimp Housing [3001](#) , [5058](#). [3002](#) KK® PC Board Connector

Shrouded	No
Stackable	No
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	0°C to +50°C
Termination Interface: Style	Through Hole

**Electrical**

Current - Maximum per Contact	7A
Voltage - Maximum	250V

**Solder Process Data**

Lead-free Process Capability	Wave Capable (TH only)
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**Material Info**

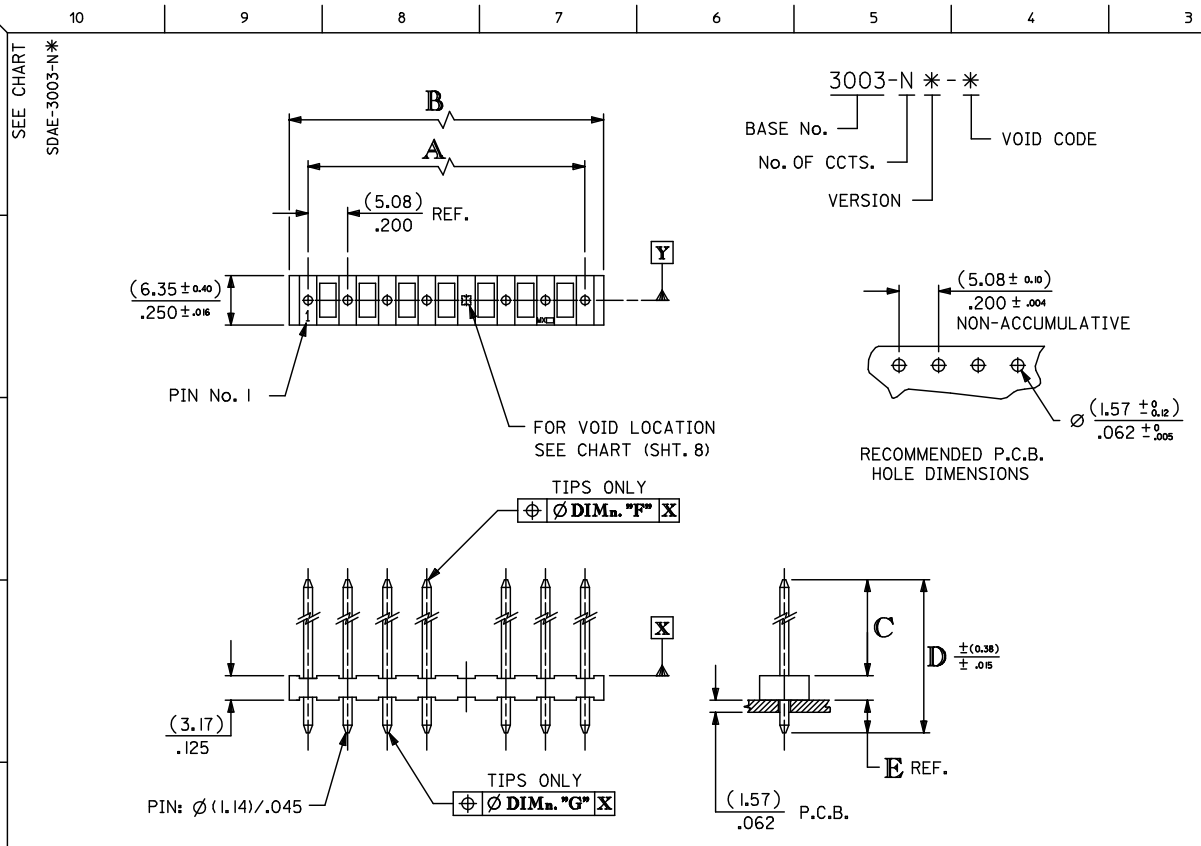
Old Part Number	300308A
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**Reference - Drawing Numbers**

Product Specification	PS-99020-0087
Sales Drawing	SDAE-3003-N*

This document was generated on 05/24/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**



No OF CCTS.	DIMn. A	DIMn. B
2	( 5.08 ± 0.05) .200 ± .002	( 9.91 ± 0.15) .390 ± .006
3	(10.16 ± 0.08) .400 ± .003	(14.99 ± 0.15) .590 ± .006
4	(15.24 ± 0.08) .600 ± .003	(20.07 ± 0.18) .790 ± .007
5	(20.32 ± 0.08) .800 ± .003	(25.15 ± 0.20) .990 ± .008
6	(25.40 ± 0.10) 1.000 ± .004	(30.23 ± 0.23) 1.190 ± .009
7	(30.48 ± 0.13) 1.200 ± .005	(35.31 ± 0.25) 1.390 ± .010
8	(35.56 ± 0.20) 1.400 ± .008	(40.39 ± 0.28) 1.590 ± .011
9	(40.64 ± 0.20) 1.600 ± .008	(45.47 ± 0.30) 1.790 ± .012
10	(45.72 ± 0.20) 1.800 ± .008	(50.55 ± 0.30) 1.990 ± .012
11	(50.80 ± 0.20) 2.000 ± .008	(55.63 ± 0.33) 2.190 ± .013
12	(55.88 ± 0.25) 2.200 ± .010	(60.71 ± 0.33) 2.390 ± .013
13	(60.96 ± 0.25) 2.400 ± .010	(65.79 ± 0.36) 2.590 ± .014
14	(66.04 ± 0.25) 2.600 ± .010	(70.87 ± 0.36) 2.790 ± .014
15	(71.12 ± 0.35) 2.800 ± .014	(75.95 ± 0.42) 2.990 ± .017
16	(76.20 ± 0.35) 3.000 ± .014	(81.03 ± 0.42) 3.190 ± .017
17	(81.28 ± 0.40) 3.200 ± .016	(86.11 ± 0.51) 3.390 ± .020
18	(86.36 ± 0.40) 3.400 ± .016	(91.19 ± 0.53) 3.590 ± .021
19	(91.44 ± 0.50) 3.600 ± .020	(96.27 ± 0.53) 3.790 ± .021
20	(96.52 ± 0.50) 3.800 ± .020	(101.35 ± 0.53) 3.990 ± .021

**NOTES:**

1. MATERIAL: WAFER, NYLON, 94V-2, COLOUR - NATURAL PINS, BRASS (FOR PLATING SEE CHARTS)
2. FOR DIMns. "A","B","C","D","E","F" AND VERSIONS, SEE CHARTS ON SHEET 2 & SUBSEQUENT SHEETS.
3. FOR VERSIONS WITH VOIDS SEE SHEET 8.
4. PIN PUSH OUT FORCE: (1.36Kg)/3lbs MIN.
5. PIN MUST MEET MOLEX SOLDERABILITY SPEC. ES-152.
6. MAX BOW (0.38)/.015 OVER (25.4)/1.00

ADD PART NO SHT 7 ELC NO: E2009-0320 DRW:BMAGUIRE 2009/04/03 CHKD: 2009/04/03 APPR:BMAGUIRE 2009/04/06 REV: BM	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± .005</td> <td>± .0004</td> </tr> <tr> <td>3 PLACES</td> <td>± .005</td> <td>± .0004</td> </tr> <tr> <td>2 PLACES</td> <td>± .005</td> <td>± .0004</td> </tr> <tr> <td>1 PLACE</td> <td>± .005</td> <td>± .0004</td> </tr> <tr> <td colspan="3">ANGULAR ± .0°</td> </tr> </table>		mm	INCH	4 PLACES	± .005	± .0004	3 PLACES	± .005	± .0004	2 PLACES	± .005	± .0004	1 PLACE	± .005	± .0004	ANGULAR ± .0°			DIMENSION STYLE MM ONLY DRAWN BY:      DATE: CHECKED BY:      DATE: APPROVED BY:      DATE:	SCALE: 1:1 DESIGN UNITS: METRIC THIRD ANGLE PROJECTION	TITLE: 5.08 MM KK HDR VT RPIN
		mm	INCH																				
	4 PLACES	± .005	± .0004																				
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ANGULAR ± .0°																							
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE TABLES SIZE: A3 THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	MOLEX INCORPORATED DOCUMENT NO. SDAE-3003-N* SHEET NO. 1 OF 00																				

10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1

INDEX# FOR FULL DIMENSIONS SEE RELEVANT SHEET.

ENG. No.	PLATING	DIM. C	DIM. D	SHT. No.
AE-3003-NA	(102)			3
AE-3003-NAG	(501)	(11.94) / .470	(19.05) / .750	6
AE-3003-NA(503)	(503)			6
AE-3003-NB	(102)	(16.69) / .657	(23.80) / .937	3
AE-3003-NC	(102)			3
AE-3003-NCG	(501)	(23.04) / .907	(30.48) / 1.200	6
AE-3003-ND	(102)			3
AE-3003-NDG	(501)	(27.81) / 1.095	(34.92) / 1.375	6
AE-3003-NF	(102)			3
AE-3003-NFG	(501)	(32.56) / 1.282	(39.68) / 1.562	6
AE-3003-NI	(102)	(13.51) / .532	(20.32) / .800	4
AE-3003-NJ	(102)	(21.46) / .845	(28.58) / 1.125	4
AE-3003-NK	(102)			4
AE-3003-NS	(501)	(18.29) / .720	(25.40) / 1.000	7
AE-3003-NM	(102)	(11.89) / .468	(23.80) / .937	4
AE-3003-NU	(102)	(11.18) / .440	(17.45) / .687	4
AE-3003-NV	(102)	(11.94) / .470	(18.29) / .720	5
AE-3003-NY	(102)	(10.90) / .430	(17.45) / .687	5

FOR VOID VERSIONS SEE SHEET 8.

<b>DOCUMENT ERROR</b> ELC NO: E2009-0513 DRAWN: BMAGUIRE 2009/04/07 CHYK: 2009/04/07 APPR: BMAGUIRE 2009/04/07 REV DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION																		
	$\nabla = 0$ $\nabla = 0$	<table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <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>±---</td> <td>±---</td> </tr> <tr> <td>1 PLACE</td> <td>±---</td> <td>±---</td> </tr> <tr> <td colspan="3">ANGULAR ±---°</td> </tr> </table>		mm	INCH	4 PLACES	±---	±---	3 PLACES	±---	±---	2 PLACES	±---	±---	1 PLACE	±---	±---	ANGULAR ±---°			MM ONLY	1:1	METRIC	
		mm	INCH																					
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ANGULAR ±---°																								
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: _____ DATE: _____ CHECKED BY: _____ DATE: _____ APPROVED BY: _____ DATE: _____	MATERIAL NO. SEE CHART SIZE A3	TITLE 5.08 MM KK HDR VT RPIN MOLEX INCORPORATED DOCUMENT NO. SDAE-3003-N* SHEET NO. 2 OF 08																					

10 | 9 | 8 | 7 | 6 | 5 | 4 | 3 | 2 | 1

ib\_frame\_A3\_P\_ME\_T  
Rev. E 2006/04/15

10 9 8 7 6 5 4 3 2 1

PART NO. SEE CHART  
DWG. NO. SDAE-3003-N\*

ENG. NO.	AE-3003-NA	AE-3003-NB	AE-3003-NC	AE-3003-ND	AE-3003-NF
DIMN. "C"	(11.94 ± 0.51) .470 ± .020	(16.69 ± 0.51) .657 ± .020	(23.04 ± 0.51) .907 ± .020	(27.81 ± 0.51) 1.095 ± .020	(32.56 ± 0.51) 1.282 ± .020
DIMN. "D"	(19.05) / .750	(23.80) / .937	(30.48) / 1.200	(34.92) / 1.375	(39.68) / 1.562
DIMN. "E"	(3.94) / .155	(3.94) / .155	(4.27) / .168	(3.94) / .155	(3.94) / .155
DIMN. "F"	(1.02) / .040	(1.02) / .040	(1.02) / .040	(1.02) / .040	(1.02) / .040
DIMN. "G"	(1.02) / .040	(1.02) / .040	(1.02) / .040	(1.02) / .040	(1.02) / .040
PLATING	(102) TIN (5.0µM) / .000200 MIN. OVER COPPER (2.5µM) / .000100 MIN.	(102) TIN (5.0µM) / .000200 MIN. OVER COPPER (2.5µM) / .000100 MIN.	(102) TIN (5.0µM) / .000200 MIN. OVER COPPER (2.5µM) / .000100 MIN.	(102) TIN (5.0µM) / .000200 MIN. OVER COPPER (2.5µM) / .000100 MIN.	(102) TIN (5.0µM) / .000200 MIN. OVER COPPER (2.5µM) / .000100 MIN.

NO. OF CIRCUITS	PART NO.		ENG. NO.		PART NO.		ENG. NO.		PART NO.		ENG. NO.	
	2	10-08-1021	AE-3003-2A	10-08-1022	AE-3003-2B	10-08-1023	AE-3003-2C	10-08-1024	AE-3003-2D	10-08-1026	AE-3003-2F	
3	▲	-1031	▲	-3A	▲	-1032	▲	-3B	▲	-1033	▲	-3C
4		-1041		-4A		-1042		-4B		-1043		-4C
5		-1051		-5A		-1052		-5B		-1053		-5C
6		-1061		-6A		-1062		-6B		-1063		-6C
7		-1071		-7A		-1072		-7B		-1073		-7C
8		-1081		-8A		-1082		-8B		-1083		-8C
9		-1091		-9A		-1092		-9B		-1093		-9C
10		-1101		-10A		-1102		-10B		-1103		-10C
11		-1111		-11A		-1112		-11B		-1113		-11C
12		-1121		-12A		-1122		-12B		-1123		-12C
13		-1131		-13A		-1132		-13B		-1133		-13C
14		-1141		-14A		-1142		-14B		-1143		-14C
15		-1151		-15A		-1152		-15B		-1153		-15C
16		-1161		-16A		-1162		-16B		-1163		-16C
17		-1171		-17A		-1172		-17B		-1173		-17C
18		-1181		-18A		-1182		-18B		-1183		-18C
19	▼	-1191	▼	-19A	▼	-1192	▼	-19B	▼	-1193	▼	-19C
20		10-08-1201	AE-3003-20A	10-08-1202	AE-3003-20B	10-08-1203	AE-3003-20C	10-08-1204	AE-3003-20D	10-08-1206	AE-3003-20F	

FOR PREVIOUS DRAWING ISSUES SEE MRI.

BK SEE SHEET 1.

THIRD ANGLE PROJECTION		REVISE ONLY ON CAD SYSTEM		SH. REV.
DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES ANGULAR #2		DRWG BY GCH	CAD/CAM FILENAME SA3003X3 DCN	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. & SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION
3 PLACE ± .		CHK'D BY	TITLE 5.08 mm KK Hdr V+ RPin	
2 PLACE ± .		APP'D BY	SHEET NO. DATE 30F 29/8 /86	
1 PLACE ± .		SCALE	PART NO. SEE CHART	
DESIGN DIMENSION (PRIMARY) □ IN. □ MM		DWG NO. SDAE-3003-N*		
EQUIVALENT DIMENSION (SECONDARY) □ IN. □ MM		SIZE B		

7132-1283 10 9 8 7 6 5 4 3 2 1