

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

**Part Number:** [0010081061](#)  
**Status:** **Active**  
**Overview:** [kk](#)  
**Description:** 5.08mm (.200") Pitch KK® Header, Vertical, Round Pin, 6 Circuits, Tin (Sn) Plating, Pin Length 19.05mm (.750")

**Documents:**

<a href="#">3D Model</a>	<a href="#">Product Specification PS-99020-0087 (PDF)</a>
<a href="#">Drawing (PDF)</a>	<a href="#">RoHS Certificate of Compliance (PDF)</a>

**Agency Certification**

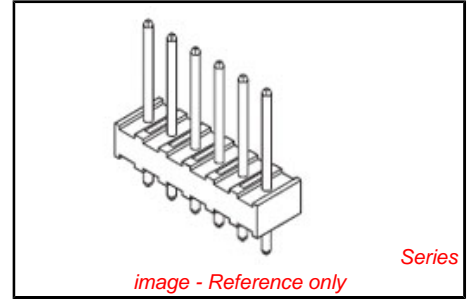
CSA	LR19980
UL	E29179

**General**

Product Family	PCB Headers
Series	3003
Application	Board-to-Board, Wire-to-Board
Overview	<a href="#">kk</a>
Product Name	KK®

**Physical**

Breakaway	No
Circuits (Loaded)	6
Circuits (maximum)	6
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**  
**Halogen-Free**

**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**  
[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**

Duration at Max. Process Temperature (seconds)	10
Lead-free Process Capability	Wave Capable (TH only)
Process Temperature max. C	260

**Material Info**

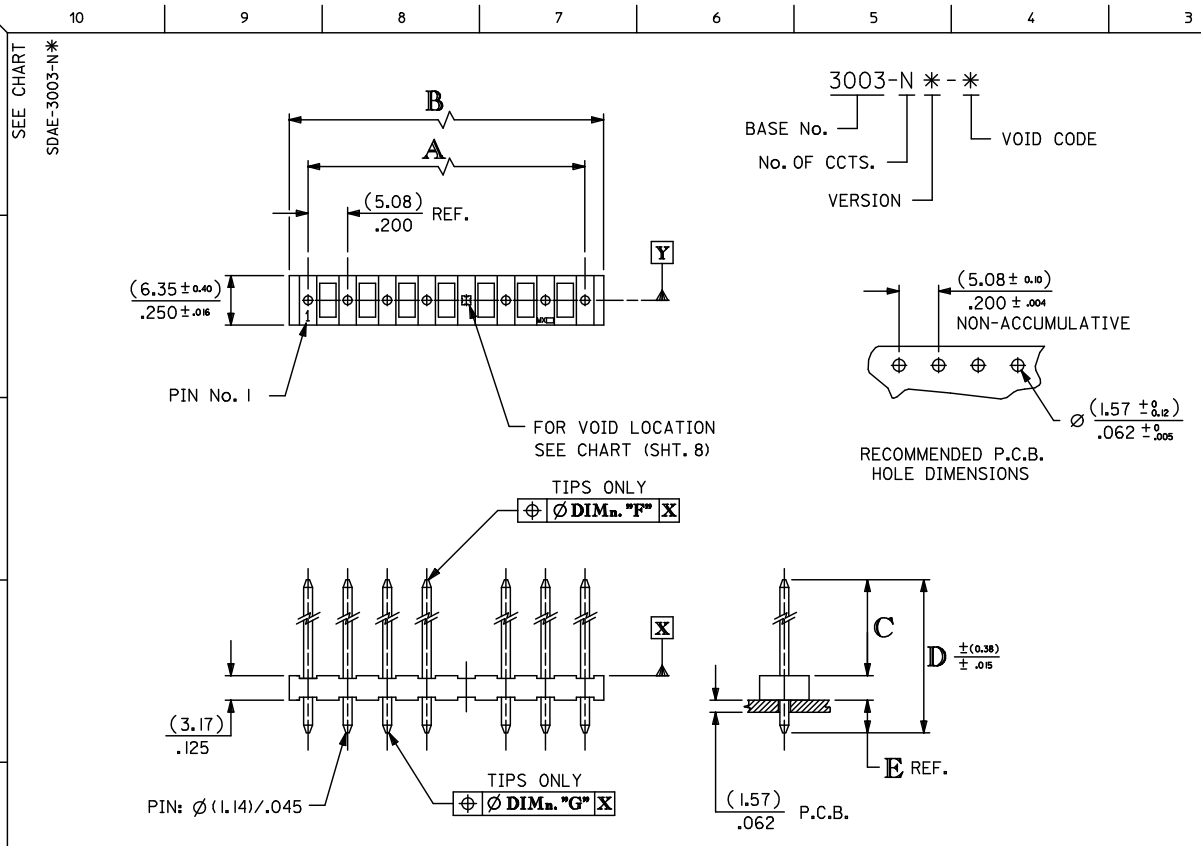
Old Part Number	3003-06A
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**Reference - Drawing Numbers**

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

This document was generated on 05/24/2010

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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 2009/07/06

QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	
	mm	INCH
▽=0	4 PLACES ± --- ± ---	
▽=0	3 PLACES ± --- ± ---	
	2 PLACES ± --- ± ---	
	1 PLACE ± --- ± ---	
	ANGULAR ± --- °	

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM ONLY		1:1	METRIC	
DRAWN BY		TITLE		
DATE		5.08 MM KK HDR VT RPIN		
CHECKED BY		DATE		
APPROVED BY		DATE		
MATERIAL NO.		DOCUMENT NO.		
SEE TABLES		SDAE-3003-N*		
SIZE		SHEET NO.		
A3		1 OF 00		

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

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> EEC 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																		
	▼ = 0 ▽ = 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																					
	4 PLACES	± ---	± ---																					
3 PLACES	± ---	± ---																						
2 PLACES	± ---	± ---																						
1 PLACE	± ---	± ---																						
ANGULAR ± --- °																								
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: DATE CHECKED BY: DATE APPROVED BY: DATE	TITLE: 5.08 MM KK HDR VT RPIN																					
		MATERIAL NO. SEE CHART 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. 2 OF 08																					

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

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

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.	
	PART NO.	ENG. NO.	PART NO.	ENG. NO.	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	▲ -1034	▲ -3D	▲ -1036	▲ -3F
4	-1041	-4A	-1042	-4B	-1043	-4C	-1044	-4D	-1046	-4F
5	-1051	-5A	-1052	-5B	-1053	-5C	-1054	-5D	-1056	-5F
6	-1061	-6A	-1062	-6B	-1063	-6C	-1064	-6D	-1066	-6F
7	-1071	-7A	-1072	-7B	-1073	-7C	-1074	-7D	-1076	-7F
8	-1081	-8A	-1082	-8B	-1083	-8C	-1084	-8D	-1086	-8F
9	-1091	-9A	-1092	-9B	-1093	-9C	-1094	-9D	-1096	-9F
10	-1101	-10A	-1102	-10B	-1103	-10C	-1104	-10D	-1106	-10F
11	-1111	-11A	-1112	-11B	-1113	-11C	-1114	-11D	-1116	-11F
12	-1121	-12A	-1122	-12B	-1123	-12C	-1124	-12D	-1126	-12F
13	-1131	-13A	-1132	-13B	-1133	-13C	-1134	-13D	-1136	-13F
14	-1141	-14A	-1142	-14B	-1143	-14C	-1144	-14D	-1146	-14F
15	-1151	-15A	-1152	-15B	-1153	-15C	-1154	-15D	-1156	-15F
16	-1161	-16A	-1162	-16B	-1163	-16C	-1164	-16D	-1166	-16F
17	-1171	-17A	-1172	-17B	-1173	-17C	-1174	-17D	-1176	-17F
18	-1181	-18A	-1182	-18B	-1183	-18C	-1184	-18D	-1186	-18F
19	▼ -1191	▼ -19A	▼ -1192	▼ -19B	▼ -1193	▼ -19C	▼ -1194	▼ -19D	▼ -1196	▼ -19F
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

NO. OF CIRCUITS

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. DWG NO. SEE CHART SDAE-3003-N* B	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MOLEX MOLEX EUROPE		
DESIGN DIMENSION (PRIMARY) <input checked="" type="checkbox"/> IN. <input type="checkbox"/> MM				
EQUIVALENT DIMENSION (SECONDARY) <input type="checkbox"/> IN. <input checked="" type="checkbox"/> MM				