

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0010081121](#)
Status: **Active**
Overview: [kk](#)
Description: 5.08mm (.200") Pitch KK® Header, Vertical, Round Pin, 12 Circuits, Tin (Sn) Plating, Pin Length 19.05mm (.750")

Documents:

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

Agency Certification

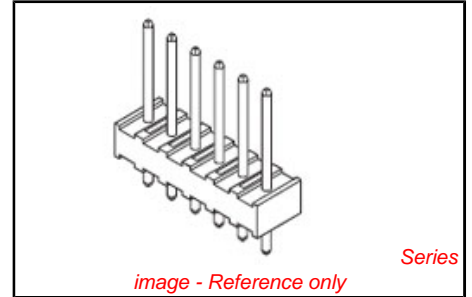
CSA	LR19980
UL	E29179

General

Product Family	PCB Headers
Series	3003
Application	Board-to-Board, Wire-to-Board
Overview	kk
Product Name	KK®

Physical

Breakaway	No
Circuits (Loaded)	12
Circuits (maximum)	12
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

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
[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

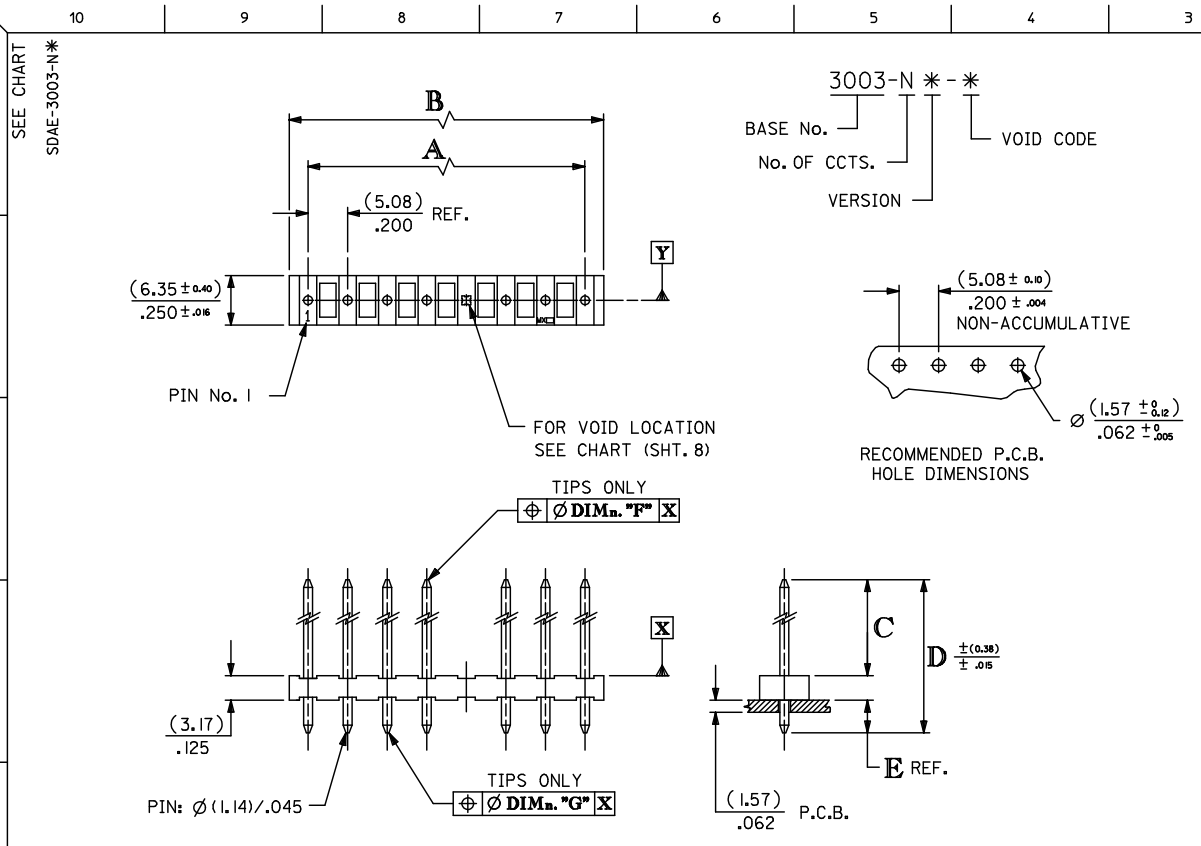
Old Part Number	3003-12A
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Reference - Drawing Numbers

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	
MM ONLY	
DRAWN BY	DATE
CHECKED BY	DATE
APPROVED BY	DATE
MATERIAL NO.	SEE TABLES
SIZE	A3

SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
1:1	METRIC	☉
TITLE 5.08 MM KK HDR VT RPIN		
MOLEX INCORPORATED		
MATERIAL NO. SDAE-3003-N*	DOCUMENT NO.	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.

DOCUMENT ERROR EEC NO: E2009-0513 DRAWN: BMAGUIRE 2009/04/07 CHKD: 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

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.	
	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		
2	↑	-1031	↑	-3A	↑	-1032	↑	-3B	↑	-1033	↑	-3C
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	↓	-1201	↓	-20A	↓	-1202	↓	-20B	↓	-1203	↓	-20C

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 ± . 2 PLACE ± . 1 PLACE ± #		CHK'D BY	TITLE 5.08 mm KK Hdr V+ RPin	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APP'D BY	SHEET NO. DATE 30F 29/8 /86	
DESIGN DIMENSION <input checked="" type="checkbox"/> (MM) (PRIMARY) <input type="checkbox"/> IN.		SCALE	PART NO. SEE CHART	
EQUIVALENT DIMENSION <input type="checkbox"/> (MM) (SECONDARY) <input checked="" type="checkbox"/> IN.		DWG NO. SDAE-3003-N* SIZE B		

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