

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

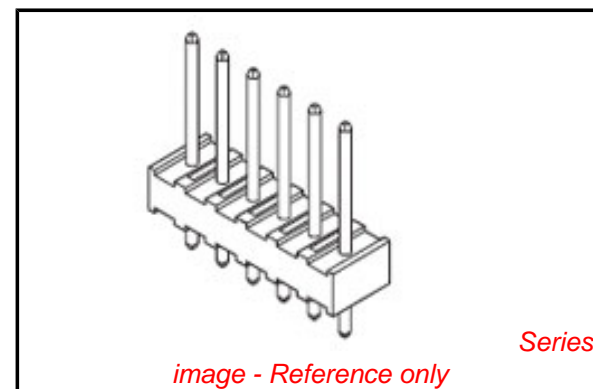
CSA LR19980
 UL E29179

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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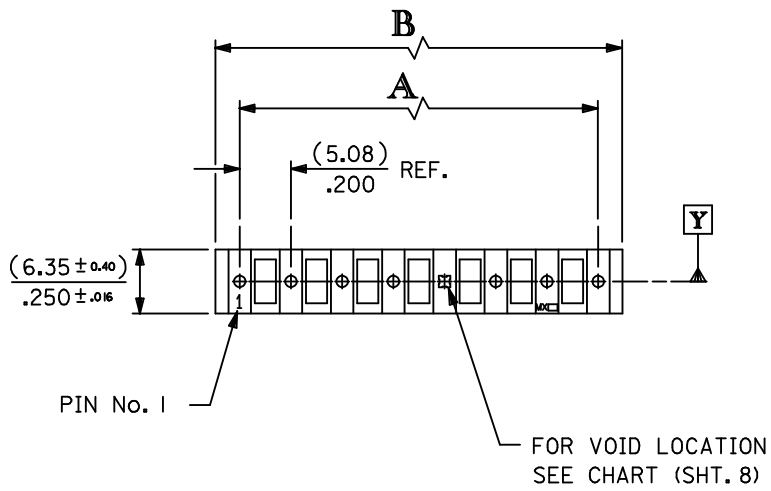
Reference - Drawing Numbers

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

This document was generated on 05/24/2010

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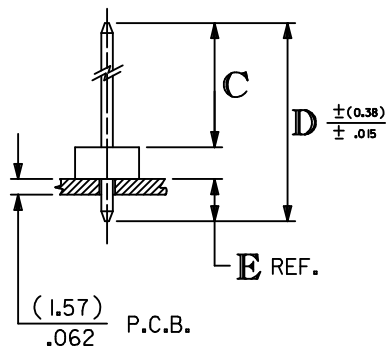
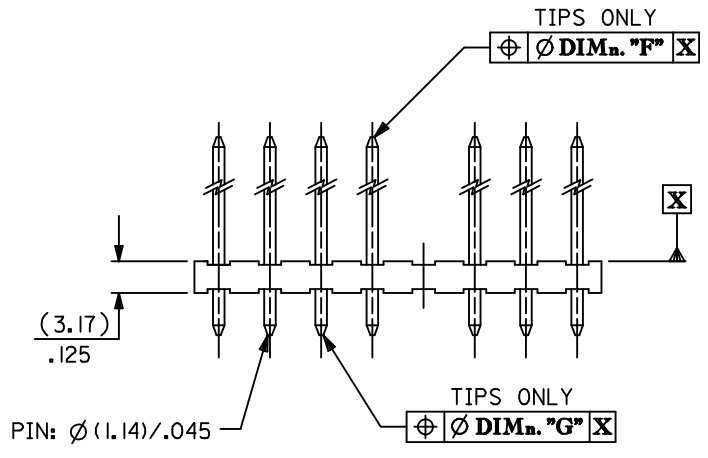
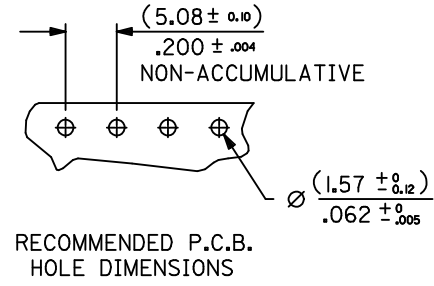
SEE CHART
SDAE-3003-N*



3003-N * - *

BASE No. VOID CODE

No. OF CCTS. VERSION



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 EC NO: E2009-0320 DRWN: BMAGUIRE 2009/04/03 CHKD: 2009/04/03 APPR: BMAGUIRE 2009/04/06	QUALITY SYMBOLS ▽=0 ∇=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM ONLY	SCALE 1:1	DESIGN UNITS METRIC	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	3 PLACES ± --- ± ---	DRAWN BY	DATE	TITLE 5.08 MM KK HDR VT RPIN		
		2 PLACES ± --- ± ---	1 PLACE ± --- ± ---	CHECKED BY	DATE	APPROVED BY		
		ANGULAR ± ---°		APPROVED BY		DATE	MATERIAL NO. SEE TABLES	
BM	REV	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			
				DOCUMENT NO. SDAE-3003-N*		SHEET NO. 1 OF 00		

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 EC NO: E2009-0513 DRWN: BMAGUIRE 2009/04/07 CHKD: APPR: BMAGUIRE 2009/04/07 REV	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▼=0 ◻=0	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± --- ANGULAR ± ---°	MM ONLY	1:1	METRIC	
		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	MOLEX INCORPORATED DOCUMENT NO. SDAE-3003-N*		SHEET NO. 2 OF 08

PART NO. SEE CHART
 DRWG. 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.	
NO. OF CIRCUITS	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	-1606	-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

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° INCH (METRIC) 3 PLACE ± . () ± 2 PLACE ± . () ± 1 PLACE () ± DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		DRWG BY GCH CHK'D BY APP'D BY	CAD/CAM FILENAME SA3003X3 DGN THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. & SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		
		TITLE			
		5.08 mm KK Hdr Vt RPin			
		MOLEX EUROPE		SHEET NO.	DATE
		PART NO. SEE CHART		30F	29/8 /86
		DWG NO. SDAE-3003-N*		SIZE	B