

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0010081022](#)
Status: **Active**
Overview: [kk](#)
Description: 5.08mm (.200") Pitch KK® Header, Vertical, Round Pin, 2 Circuits, Tin (Sn) Plating, Pin Length 23.80mm (.937")

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) 2
 Circuits (maximum) 2
 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

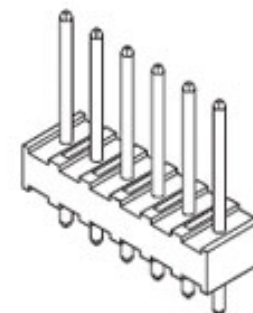


image - Reference only

Series

EU RoHS

ELV and RoHS Compliant
REACH SVHC Contains SVHC: No
Halogen-Free Status
Halogen-Free

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	300302B
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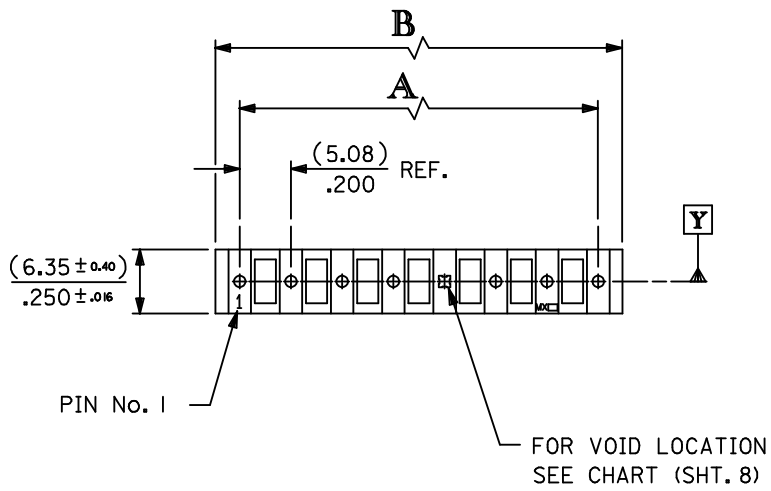
Reference - Drawing Numbers

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

This document was generated on 05/24/2010

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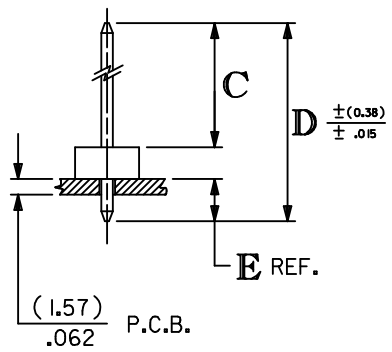
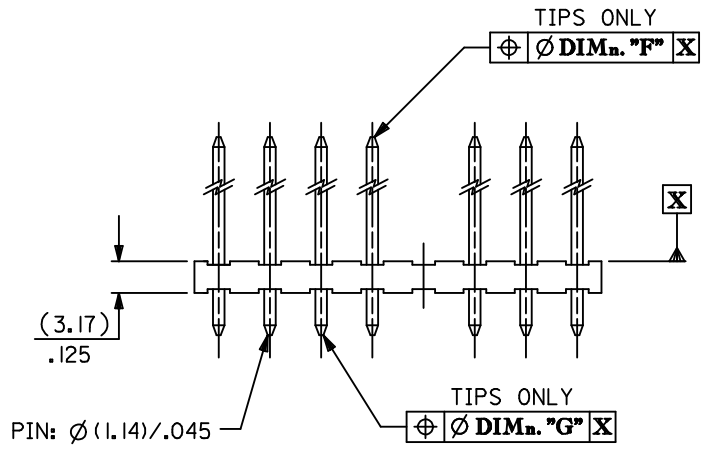
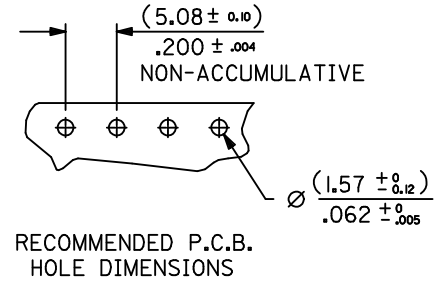
SEE CHART
SDAE-3003-N*



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	DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		▽=0 ∇=0	mm INCH	MM ONLY	1:1	METRIC		
			4 PLACES ± --- ± --- 3 PLACES ± --- ± --- 2 PLACES ± --- ± --- 1 PLACE ± --- ± ---	DRAWN BY DATE	TITLE			
			ANGULAR ± ---°	CHECKED BY DATE	5.08 MM KK HDR VT RPIN			
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	APPROVED BY DATE	MATERIAL NO. DOCUMENT NO. SHEET NO.			
				SEE TABLES	MOLEX INCORPORATED			
				SIZE A3	SDAE-3003-N* 1 OF 00			
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				

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: 2009/04/07 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	☉ ◻ THIRD ANGLE PROJECTION
		DRAWN BY DATE	TITLE	5.08 MM KK HDR VT RPIN		
		CHECKED BY DATE	APPROVED BY DATE	MOLEX INCORPORATED		
		MATERIAL NO.	SEE CHART	DOCUMENT NO.	SDAE-3003-N*	
		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		
						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 <h2 style="text-align: center;">5.08 mm KK Hdr Vt RPin</h2>	
DESIGN DIMENSION (PRIMARY) <input checked="" type="checkbox"/> (MM) <input type="checkbox"/> IN. EQUIVALENT DIMENSION (SECONDARY) <input type="checkbox"/> (MM) <input checked="" type="checkbox"/> IN.		SCALE	MOLEX EUROPE	SHEET NO. 30F	DATE 29/8 /86
PART NO. SEE CHART			DWG NO. SDAE-3003-N*	SIZE B	