

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0010451046](#)
Status: **Active**
Overview: [kk](#)
Description: 5.08mm (.200") Pitch KK® Header, Vertical, Round Pin, 4 Circuits, Gold (Au) 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) 4
 Circuits (maximum) 4
 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
 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
 Shrouded No

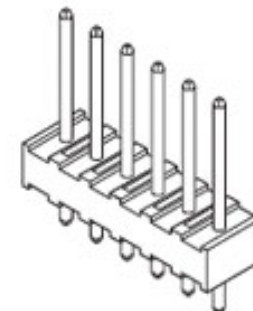


image - Reference only

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

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

Material Info

Old Part Number	3003-4EG
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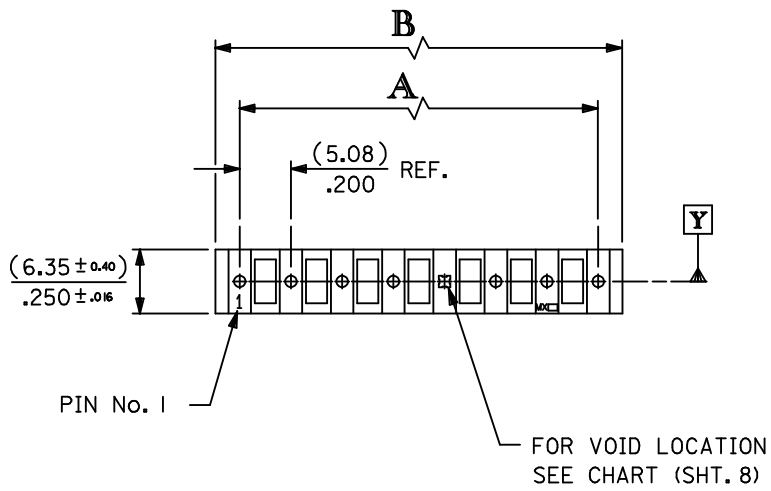
Reference - Drawing Numbers

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

This document was generated on 05/24/2010

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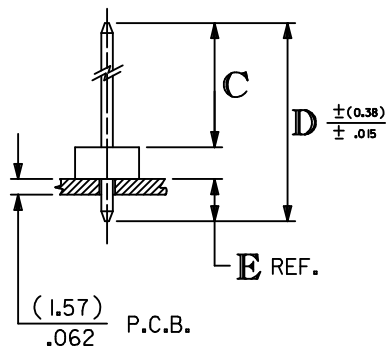
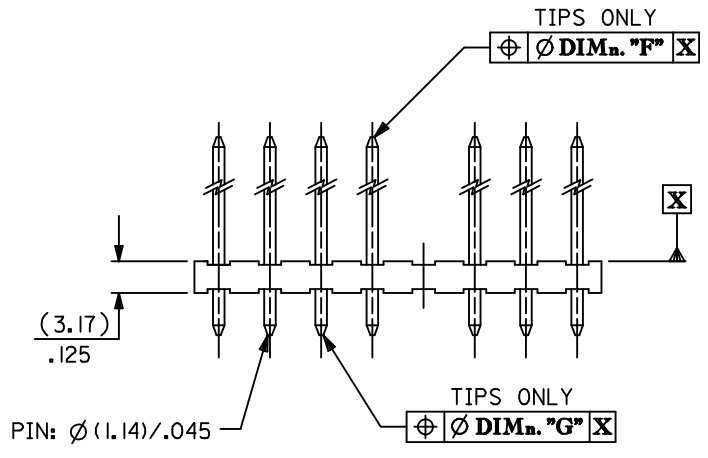
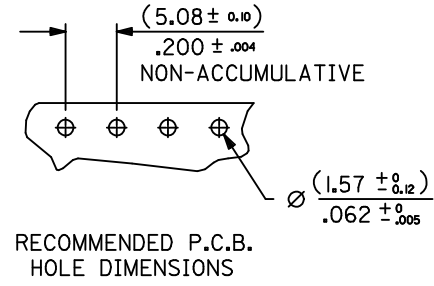
SEE CHART
SDAE-3003-N*



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 ± ---°		MATERIAL NO.		DOCUMENT NO.		SHEET NO.
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			

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	MM ONLY	1:1	METRIC			
		4 PLACES	± ---	± ---	DRAWN BY	DATE	TITLE		
		3 PLACES	± ---	± ---	CHECKED BY	DATE	5.08 MM KK HDR VT RPIN		
	2 PLACES	± ---	± ---	APPROVED BY	DATE	MOLEX INCORPORATED			
	1 PLACE	± ---	± ---	ANGULAR ± ---°		MATERIAL NO.		SHEET NO.	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		DOCUMENT NO.		2 OF 08	
				SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION				
				A3					

ENG. NO.	AE-3003-NS		AE-3003-NEG		
DIMN. "C"	(18.29 ±0.51) .720 ±.020		(20.00±0.51) .787±.020		
DIMN. "D"	(25.40) / 1.000		(30.48) / 1.200		
DIMN. "E"	(3.94) / .155		(7.31) / .288		
DIMN. "F"	(1.02) / .040		(1.02) / .040		
DIMN. "G"	(1.02) / .040		(1.02) / .040		
PLATING	(501) GOLD (0.5µM) / .000020 MIN. OVER NICKEL (0.76µM) / .000030 MIN.		(501) GOLD (0.5µM) / .000020 MIN. OVER NICKEL (0.76µM) / .000030 MIN.		
	PART NO.	ENG NO.	PART NO.	ENG NO.	
NO. OF CIRCUITS	2	10-45-1023	AE-3003-2S	10-45-1026	AE-3003-2EG
	3	▲ -1033	▲ -3S	▲ 1036	▲ -3EG
	4	-1043	-4S	1046	-4EG
	5	-1053	-5S	1056	-5EG
	6	-1063	-6S	1066	-6EG
	7	-1073	-7S	1076	-7EG
	8	-1083	-8S	1086	-8EG
	9	-1093	-9S	1096	-9EG
	10	-1103	-10S	1106	-10EG
	11	-1113	-11S	1116	-11EG
	12	-1123	-12S	1126	-12EG
	13	-1133	-13S	1136	-13EG
	14	-1143	-14S	1146	-14EG
	15	-1153	-15S	1156	-15EG
	16	-1163	-16S	1166	-16EG
	17	-1173	-17S	1176	-17EG
	18	-1183	-18S	1186	-18EG
	19	▼ -1193	▼ -19S	▼ 1196	▼ -19EG
	20	10-45-1203	AE-3003-20S	10-45-1206	AE-3003-20EG

ADD PART NO. EC NO: E2009-0320 DRWN: BMAGUIRE 2009/04/03 CHKD: 2009/04/03 APPR: BMAGUIRE 2009/04/06 REV	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 CHECKED BY DATE APPROVED BY DATE	TITLE 5.08 MM KK HDR VT RPIN			
		ANGULAR ± ---°	MATERIAL NO. DOCUMENT NO.	MOLEX INCORPORATED SDAE-3003-N*			
BL		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	SHEET NO. 7 OF 00			
			SIZE A3	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			