

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0010451101](#)
Status: **Active**
Overview: [kk](#)
Description: 5.08mm (.200") Pitch KK® Header, Vertical, Round Pin, 10 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

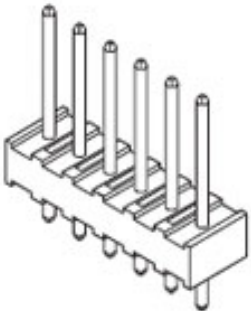
CSA LR19980
UL E29179

General

Product Family PCB Headers
Series [3003](#)
Application Board-to-Board, Wire-to-Board
Overview [kk](#)
Product Name KK®

Physical

Breakaway No
Circuits (Loaded) 10
Circuits (maximum) 10
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) 20
Plating min: Mating (µm) .5
Plating min: Termination (µin) 30
Plating min: Termination (µm) .76
Polarized to Mating Part No
Polarized to PCB No



Series

image - Reference only

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 Terminal Housing [3001](#) , [5058](#)

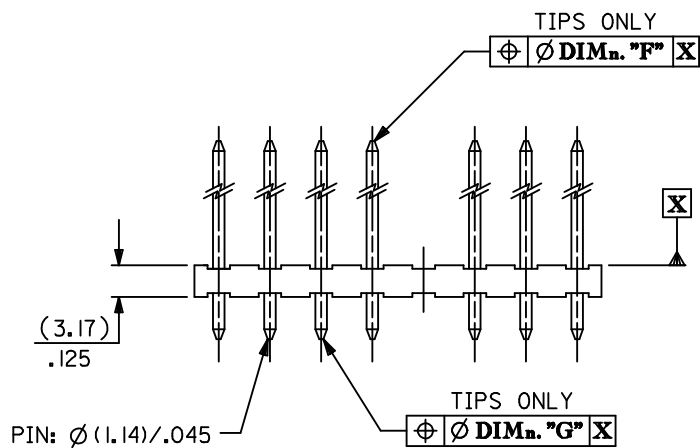
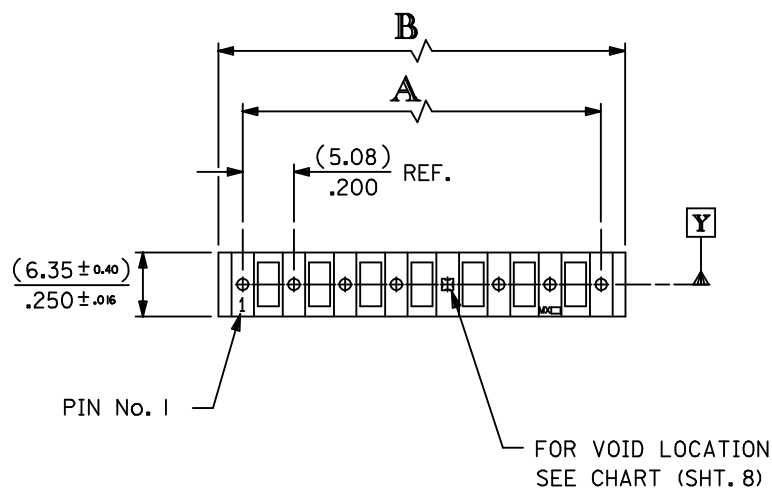
Shrouded	No
Stackable	No
Surface Mount Compatible (SMC)	No
Temperature Range - Operating	0°C to +50°C
Termination Interface: Style	Through Hole
Electrical	
Current - Maximum per Contact	7A
Voltage - Maximum	250V
Solder Process Data	
Lead-free Process Capability	Wave Capable (TH only)
Material Info	
Old Part Number	3003-10AG
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

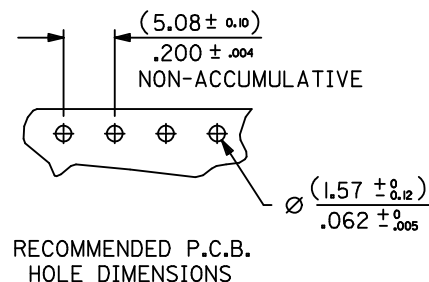
SDAE-3003-N*



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
CHKD:
APPR: BMAGUIRE
REV

QUALITY SYMBOLS
▽=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	± ---	± ---
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 1:1

DESIGN UNITS METRIC

THIRD ANGLE PROJECTION

TITLE 5.08 MM KK HDR VT RPIN

MOLEX MOLEX INCORPORATED

DOCUMENT NO. SDAE-3003-N*

SHEET NO. 1 OF 00

THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION

SEE CHART

SDAE-3003-N*

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

CHKD:

APPR:BMAGUIRE

REV

BM

QUALITY SYMBOLS

DESCRIPTION

▽=0

◻=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

mm

INCH

4 PLACES ± --- ± ---

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 CHART

SIZE

A3

SCALE

1:1

DESIGN UNITS

METRIC

THIRD ANGLE PROJECTION

TITLE

5.08 MM KK HDR VT RPIN

molex

MOLEX INCORPORATED

DOCUMENT NO.

SDAE-3003-N*

SHEET NO.

2 OF 08

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10		9		8		7		6		5		4		3		2		1																									
F	PART NO. SEE CHART DWG. NO. SDAE-3003-N*	ENG. NO.		AE-3003-NAG		AE-3003-NA(503)		AE-3003-NCG		AE-3003-NDG		AE-3003-NFG																															
		DIMN. "C"		(11.94 ±0.51) .470 ±.020		(11.94 ±0.51) .470 ±.020		(23.04 ±0.51) .907 ±.020		(27.81 ±0.51) 1.095 ±.020		(32.56 ±0.51) 1.282 ±.020																															
E		DIMN. "D"		(19.05) / .750		(19.05) / .750		(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		(501) GOLD (0.5µM)/.000020 MIN. OVER NICKEL (0.76µM)/.000030 MIN.		(503) GOLD (0.76µM)/.000030 MIN. OVER NICKEL (1.27µM)/.000050 MIN.		(501) GOLD (0.5µM)/.000020 MIN. OVER NICKEL (0.76µM)/.000030 MIN.		(501) GOLD (0.5µM)/.000020 MIN. OVER NICKEL (0.76µM)/.000030 MIN.		(501) GOLD (0.5µM)/.000020 MIN. OVER NICKEL (0.76µM)/.000030 MIN.																															
D	NO. OF CIRCUITS			PART NO.	ENG NO.			PART NO.	ENG NO.	PART NO.	ENG NO.	PART NO.	ENG NO.																														
		2	10-45-1021	AE-3003-2AG	NOT TOOLED	AE-3003-2A(503)	10-45-1025	AE-3003-2CG	10-45-1024	AE-3003-2DG	38-00-2482	AE-3003-2FG																															
		3	▲ -1031	▲ -3AG	▲	▲ -3A(503)	▲ -1035	▲ -3CG	▲ -1034	▲ -3DG	▲ -2483	▲ -3FG																															
		4	-1041	-4AG		-4A(503)	-1045	-4CG	-1044	-4DG	-2484	-4FG																															
		5	-1051	-5AG		-5A(503)	-1055	-5CG	-1054	-5DG	-2485	-5FG																															
		6	-1061	-6AG		-6A(503)	-1065	-6CG	-1064	-6DG	-2486	-6FG																															
		7	-1071	-7AG		-7A(503)	-1075	-7CG	-1074	-7DG	-2487	-7FG																															
		8	-1081	-8AG		-8A(503)	-1085	-8CG	-1084	-8DG	-2488	-8FG																															
		9	-1091	-9AG		-9A(503)	-1095	-9CG	-1094	-9DG	-2489	-9FG																															
		10	-1101	-10AG		-10A(503)	-1105	-10CG	-1104	-10DG	-2490	-10FG																															
		11	-1111	-11AG		-11A(503)	-1115	-11CG	-1114	-11DG	-2491	-11FG																															
		12	-1121	-12AG		-12A(503)	-1125	-12CG	-1124	-12DG	-2492	-12FG																															
		13	-1131	-13AG		-13A(503)	-1135	-13CG	-1134	-13DG	-2493	-13FG																															
		14	-1141	-14AG		-14A(503)	-1145	-14CG	-1144	-14DG	-2494	-14FG																															
		15	-1151	-15AG		-15A(503)	-1155	-15CG	-1154	-15DG	-2495	-15FG																															
		16	-1161	-16AG		-16A(503)	-1165	-16CG	-1164	-16DG	-2496	-16FG																															
		17	-1171	-17AG		-17A(503)	-1175	-17CG	-1174	-17DG	-2497	-17FG																															
		18	-1181	-18AG		-18A(503)	-1185	-18CG	-1184	-18DG	-2498	-18FG																															
		19	▼ -1191	▼ -19AG	▼	▼ -19A(503)	▼ -1195	▼ -19CG	▼ -1194	▼ -19DG	▼ -2499	▼ -19FG																															
		20	10-45-1201	AE-3003-20AG	NOT TOOLED	AE-3003-20A(503)	10-45-1205	AE-3003-20CG	10-45-1204	AE-3003-20DG	38-00-2500	AE-3003-20FG																															
				SEE VOIDS																																							
												FOR PREVIOUS DRAWING ISSUES SEE MRI.		BK SEE SHEET 1.		LTR		REV. BY		GCH		CHK'D BY		APP'D BY		SCALE		CAD/CAM FILENAME SA3003X6 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 MOLEX EUROPE		SHEET NO. DATE 60F 29/8 /86		PART NO. SEE CHART		DWG NO. SDAE-3003-N*		SIZE B	
10		9		8		7		6		5		4		3		2		1																									