

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number:

0010451121

Status:

Active

Overview:

kk

Description:

5.08mm (.200") Pitch KK® Header, Vertical, Round Pin, 12 Circuits, Gold (Au) Plating, Pin Length 19.05mm (.750")

Documents:

3D Model

Drawing (PDF)

Product Specification PS-99020-0087 (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)

20

Plating min: Mating (µm)

.5

Plating min: Termination (µin)

30

Plating min: Termination (µm)

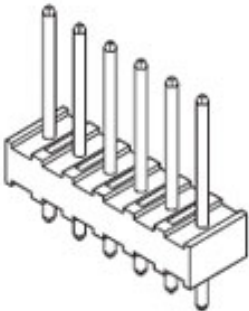
.76

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

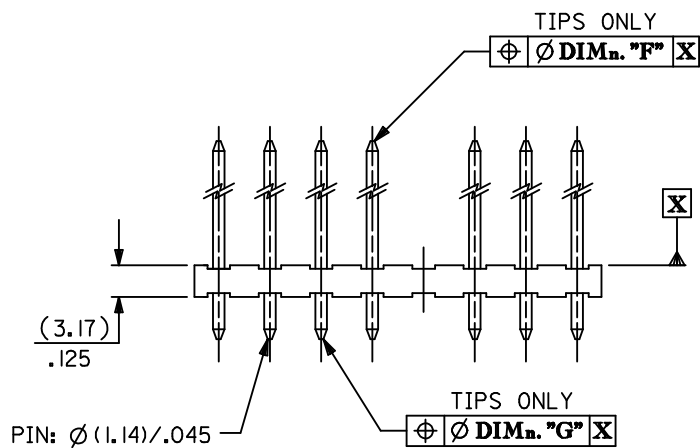
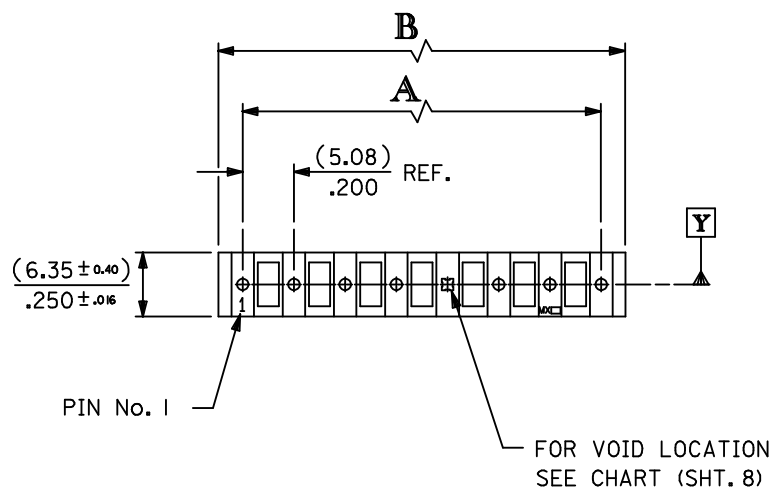
Mates With

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	3003-12AG
Reference - Drawing Numbers	
Product Specification	PS-99020-0087
Sales Drawing	SDAE-3003-N*

This document was generated on 05/24/2010

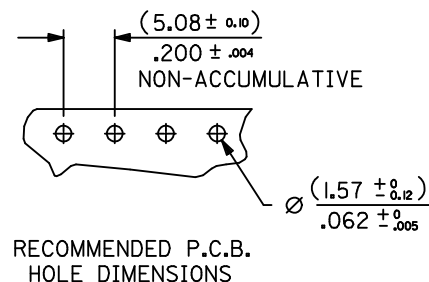
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

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								
E	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								
	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								
D	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.								
	PART NO.		ENG NO.				PART NO.		ENG NO.		PART NO.		ENG NO.						
C	NO. OF CIRCUITS	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.																			
A	BK	SEE SHEET 1.	LTR	REVISIONS	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 DESIGN DIMENSION (PRIMARY) ☒ (MM) ☐ IN. EQUIVALENT DIMENSION (SECONDARY) ☐ (MM) ☒ IN.				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 PART NO. SEE CHART DWG NO. SDAE-3003-N* SHEET NO. 60F DATE 29/8 /86 SIZE B										
7132-1283 10 9 8 7 6 5 4 3 2 1																			