

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0010455121](#)  
**Status:** **Active**  
**Overview:** [kk](#)  
**Description:** 5.08mm (.200") Pitch KK® Header, Vertical, with Polarizing Backwall, 12 Circuits, Gold (Au) Plating

**Documents:**

[3D Model](#) [Product Specification PS-99020-0087 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

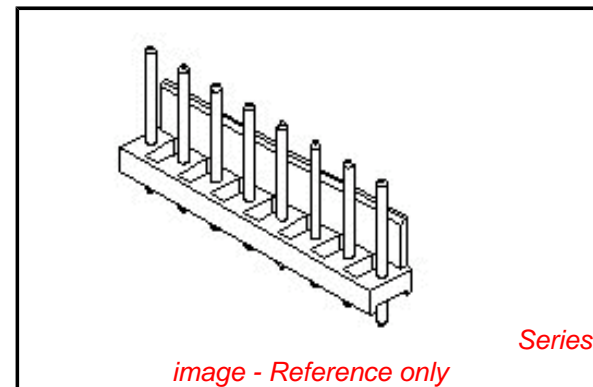
UL E29179

**General**

Product Family PCB Headers  
 Series [2599](#)  
 Application Wire-to-Board  
 Overview [kk](#)  
 Product Name KK®

**Physical**

Breakaway No  
 Circuits (Loaded) 12  
 Circuits (maximum) 12  
 Color - Resin Natural  
 Durability (mating cycles max) 50  
 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 Gold  
 Material - Plating Termination Gold  
 Material - Resin Nylon  
 Number of Rows 1  
 Orientation Vertical  
 PC Tail Length (in) 0.175 In  
 PC Tail Length (mm) 4.45 mm  
 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  
 Plating min: Mating (µin) 20  
 Plating min: Mating (µm) 0.5  
 Plating min: Termination (µin) 20  
 Plating min: Termination (µm) 0.5  
 Polarized to PCB No  
 Shrouded Partial  
 Stackable Yes  
 Surface Mount Compatible (SMC) No  
 Temperature Range - Operating 0°C to +75°C  
 Termination Interface: Style Through Hole



**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](mailto: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**

[2599Series](#)

**Mates With**

KK® Crimp Terminal Housing [3001](#) , [5058](#)

**Electrical**

Current - Maximum per Contact  
Voltage - Maximum

7A  
250V

**Material Info**

Old Part Number

2599M12AG

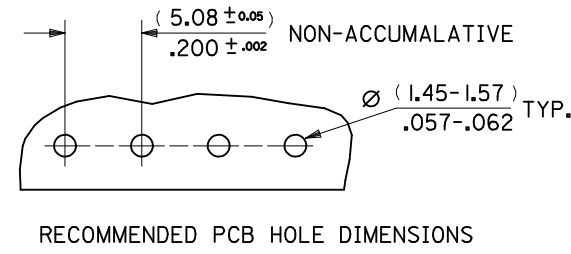
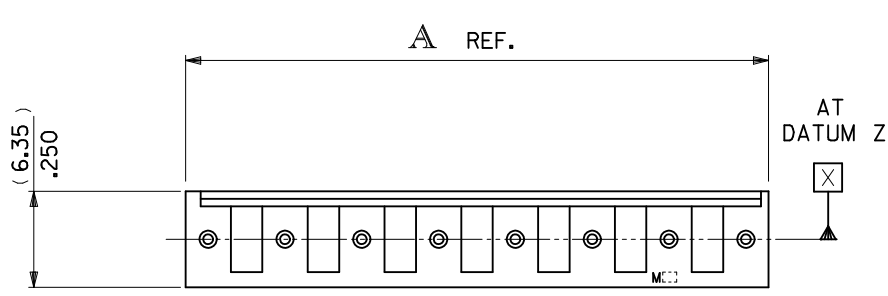
**Reference - Drawing Numbers**

Product Specification  
Sales Drawing

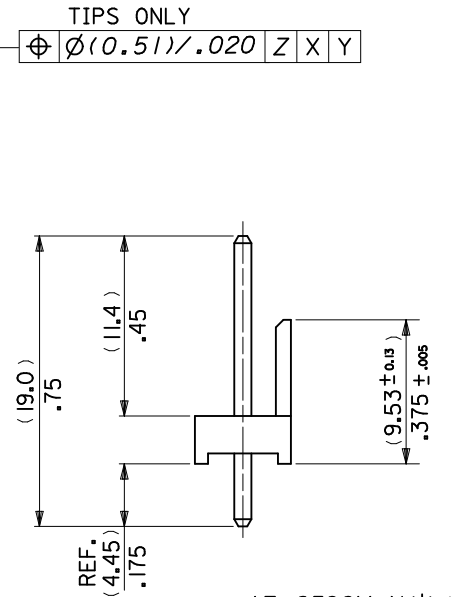
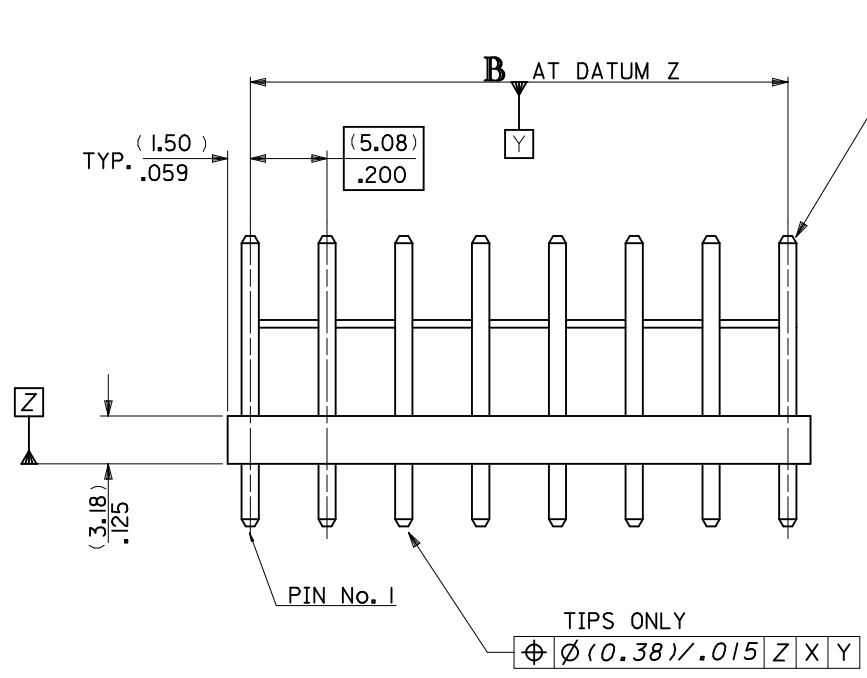
PS-99020-0087  
SDAE-2599M-N\*

This document was generated on 05/24/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**



No OF CCTS.	DIMn. A	DIMn. B
2	( 8.08) / .318	( 5.08 ± 0.13) / .200 ± .005
3	(13.16) / .518	(10.16 ± 0.13) / .400 ± .005
4	(18.24) / .718	(15.24 ± 0.13) / .600 ± .005
5	(23.32) / .918	(20.32 ± 0.13) / .800 ± .005
6	(28.40) / 1.118	(25.40 ± 0.15) / 1.000 ± .006
7	(33.48) / 1.318	(30.48 ± 0.18) / 1.200 ± .007
8	(38.56) / 1.518	(35.56 ± 0.18) / 1.400 ± .007
9	(43.64) / 1.718	(40.64 ± 0.20) / 1.600 ± .008
10	(48.72) / 1.918	(45.72 ± 0.20) / 1.800 ± .008
11	(53.80) / 2.118	(50.80 ± 0.20) / 2.000 ± .008
12	(58.88) / 2.318	(55.88 ± 0.23) / 2.200 ± .009
13	(63.96) / 2.518	(60.96 ± 0.23) / 2.400 ± .009
14	(69.04) / 2.718	(66.04 ± 0.25) / 2.600 ± .010
15	(74.12) / 2.918	(71.12 ± 0.25) / 2.800 ± .010
16	(79.20) / 3.118	(76.20 ± 0.25) / 3.000 ± .010
17	(84.28) / 3.318	(81.28 ± 0.28) / 3.200 ± .011
18	(89.36) / 3.518	(86.36 ± 0.28) / 3.400 ± .011
19	(94.44) / 3.718	(91.44 ± 0.30) / 3.600 ± .012
20	(99.52) / 3.918	(96.52 ± 0.30) / 3.800 ± .012



AE-2599M-N\*  
 NO. OF CKTS.      VOID CKT. LOCn.  
 VERSION  
 SEE SHEET 2

- NOTES:
1. WAFER MATERIAL: NYLON 6/6, UL94V-2  
 TERMINAL PIN: (1.14)/.045 DIA. BRASS
  2. FOR PLATING, SEE CHARTS.
  3. PRODUCT SPECIFICATION: PS-99020-0087
  4. PIN PUSH OUT FORCE (13.34N)/3LBS. MIN.
  5. PINS MUST CONFORM TO MOLEX SOLDERABILITY SPEC. ES-152.
  6. RECOMMENDED PCB THICKNESS 1.6MM.
  7. THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

PIN POSITION TOL. EC NO: UCP2010-1815 DRWN:MK/PPER 2010/05/26 CHKD:SS/USEK 2010/05/26 APPR:FSM/TH 2010/06/03	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION									
	$\nabla = 0$ $\sphericalangle = 0$	<table border="1"> <tr><th>mm</th><th>INCH</th></tr> <tr><td>4 PLACES ± ---</td><td>± ---</td></tr> <tr><td>3 PLACES ± ---</td><td>± .010</td></tr> <tr><td>2 PLACES ± 0.25</td><td>± .014</td></tr> <tr><td>1 PLACE ± 0.35</td><td>± ---</td></tr> </table>	mm	INCH	4 PLACES ± ---	± ---	3 PLACES ± ---	± .010	2 PLACES ± 0.25	± .014	1 PLACE ± 0.35	± ---	MM/IN	3:1	METRIC
mm	INCH														
4 PLACES ± ---	± ---														
3 PLACES ± ---	± .010														
2 PLACES ± 0.25	± .014														
1 PLACE ± 0.35	± ---														

DRAWN BY	DATE	TITLE
MC	23/02/1988	WAFER KK (5.08)/.200 CENTRES WITH POLARIZING WALL
CHECKED BY	DATE	MOLEX INCORPORATED
DMORIARTY		
APPROVED BY	DATE	
JDENNEHY	2010/05/26	
MATERIAL NO.	DOCUMENT NO.	SHEET NO.
SEE CHART	SDAE-2599M-N*	1 OF 2

ANGULAR ± ---°	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
----------------	--	---------	---

PART NO. SEE CHART  
 DWG. NO. SDAE-2599M-N\*

No. OF CCTS.
2
3
4
5
6
7
8
9
10
11
12
13
14
15
16
17
18
19
20
PLATING

AE-2599M-NA	
PART No.	ENG. No.
10-08-5021	AE-2599M- 2 A
↑ 5031	↑ 3 A
5041	4 A
5051	5 A
5061	6 A
5071	7 A
5081	8 A
5091	9 A
5101	10 A
5111	11 A
5121	12 A
5131	13 A
5141	14 A
5151	15 A
5161	16 A
5171	17 A
5181	18 A
↓ 5191	↓ 19 A
10-08-5201	AE-2599M- 20 A
(0.0051)/.0002 MIN TIN OVER (0.0025)/.0001 MIN COPPER	

AE-2599M-NAG	
PART No.	ENG. No.
10-45-5021	AE-2599M- 2 AG
↑ 5031	↑ 3 AG
5041	4 AG
5051	5 AG
5061	6 AG
5071	7 AG
5081	8 AG
5091	9 AG
5101	10 AG
5111	11 AG
5121	12 AG
5131	13 AG
5141	14 AG
5151	15 AG
5161	16 AG
5171	17 AG
5181	18 AG
↓ 5191	↓ 19 AG
10-45-5201	AE-2599M- 20 AG
(0.0005)/.00002 MIN GOLD OVER (0.0005)/.00005 MIN NICKEL	

AE-2599M-NA-*			
PART No.	ENG. No.	PART No.	ENG. No.
38-00-0888	AE-2599M- 3 A-1	38-00-7480	AE-2599M- 8 A-5
38-00-7089	↑ 3 A-2	38-00-7486	↑ 8 A-1,5
38-00-7586	3 A-3	38-00-7097	8 A-3,5
38-00-7091	4 A-1,3	38-00-7606	8 A-3,6
38-00-7090	4 A-2	38-00-7598	8 A-5,7
38-00-7092	4 A-3	38-00-7485	8 A-5,8
38-00-4903	4 A-2,3	38-00-8278	08 A-2
38-00-7483	5 A-2	38-00-7660	8 A-3
38-00-7610	5 A-2,4	38-00-7707	8 A-6
38-00-7093	5 A-3	38-00-8277	8 A-7
38-00-7594	5 A-4	38-00-7609	9 A-2
38-00-7487	5 A-5	38-00-7084	9 A-3
38-00-7584	6 A-2	38-00-7585	9 A-4
38-00-7094	6 A-3	38-00-7607	9 A-4,7
38-00-7095	6 A-4	38-00-7098	9 A-5
38-00-7096	6 A-5	38-00-7599	9 A-6
38-00-7100	6 A-4,5	38-00-7670	9 A-7
38-00-7479	6 A-6	38-00-7484	10 A-3
38-00-1208	7 A-2	38-00-4902	10 A-4
38-00-7608	7 A-2,5	38-00-4905	10 A-6
38-00-7481	7 A-3	38-00-7099	11 A-5
38-00-0887	7 A-4	38-00-4900	12 A-2
38-00-7595	7 A-5	38-00-7482	12 A-4
38-00-7596	7 A-6	38-00-4899	12 A-6
38-00-7664	↓ 8 A-3	38-00-4904	12 A-8
38-00-7597	AE-2599M- 8 A-4	38-00-4901	12 A-9
		38-00-7600	12 A-3,10
		38-00-7601	12 A-6,10
		38-00-7709	13 A-4
		38-00-7085	↓ 14 A-4
		38-00-7087	AE-2599M- 17 A-4
(0.0051)/.0002 MIN TIN OVER (0.0025)/.0001 MIN COPPER			

FOR PREVIOUS  
DRAWING ISSUES  
SEE MRI.

PART#38-00-8278 &  
ENG#AE-2599M-08 A-2 ADDED  
E2 NO. E2004-0350  
DRWN: PSHEAHAN 03/10/16  
CHK: / / /  
APPR: / / /  
ZA

QUALITY SYMBOLS  
MAJOR  
CRITICAL

GENERAL TOLERANCES:  
(UNLESS SPECIFIED)

	mm	INCH
4 PLACES	±0.	±.
3 PLACES	±0.	±.
2 PLACES	±0.	±.
1 PLACE	±0.	±.

ANGULAR: ± °

DRAFT WHERE APPLICABLE MUST  
REMAIN WITHIN DIMENSIONS

SCALE  
DESIGN UNITS  
 mm  INCH

THIRD ANGLE PROJECTION

DRAWN BY & DATE  
MC 23/02/88

CHECKED BY & DATE

APPROVED BY & DATE

CAD FILENAME SA2599MX2 DGN

DIMENSIONS:  
 mm  INCH  mm ONLY  INCH ONLY

SHT REV  
REVISE ON CAD ONLY

TITLE:  
WAFER, KK.  
(5.08)/.200 CENTRES  
WITH POLARISING WALL

MOLEX INCORPORATED

MATERIAL NO. SEE CHART  
DRAWING NO. SDAE-2599M-N\*  
SHEET NO. 20F

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

SIZE B