

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

**Part Number:** [0416620029](#)  
**Status:** **Active**  
**Description:** 3.96mm (.156") Pitch KK® Header, Breakaway, Right Angle, 7 Circuits, 0.76µm (30µ") Gold (Au) Selective Plating

**Documents:**

|   |  |
|---|--|
| <a href="#">3D Model</a>                      | <a href="#">Product Specification PS-08-50 (PDF)</a> |
| <a href="#">Drawing (PDF)</a>                 | <a href="#">RoHS Certificate of Compliance (PDF)</a> |
| <a href="#">Packaging Specification (PDF)</a> |  |

**Agency Certification**

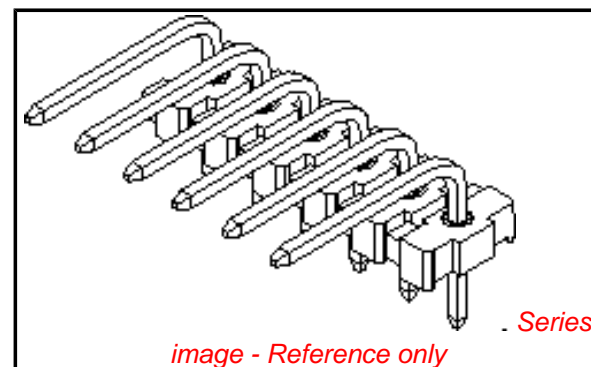
|     |         |
|-----|---------|
| CSA | LR19980 |
| UL  | E29179  |

**General**

|                |                               |
|----------------|-------------------------------|
| Product Family | PCB Headers                   |
| Series         | <a href="#">41662</a>         |
| Application    | Board-to-Board, Wire-to-Board |
| Product Name   | KK®                           |

**Physical**

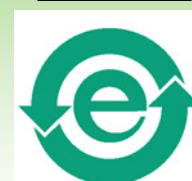
|                                |              |
|--------------------------------|--------------|
| Breakaway                      | Yes          |
| Circuits (Loaded)              | 7            |
| Circuits (maximum)             | 7            |
| Color - Resin                  | Black        |
| Durability (mating cycles max) | 50           |
| First Mate / Last Break        | No           |
| Flammability                   | 94V-0        |
| 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 | Tin          |
| Material - Resin               | Polyester    |
| Number of Rows                 | 1            |
| Orientation                    | Right Angle  |
| PC Tail Length (in)            | 0.184 In     |
| PC Tail Length (mm)            | 4.67 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)  | 0.156 In     |
| Pitch - Mating Interface (mm)  | 3.96 mm      |
| Plating min: Mating (µin)      | 30           |
| Plating min: Mating (µm)       | 0.75         |
| Plating min: Termination (µin) | 100          |
| Plating min: Termination (µm)  | 2.5          |
| Polarized to Mating Part       | Yes          |
| Polarized to PCB               | No           |
| Shrouded                       | Partial      |
| Stackable                      | No           |
| Temperature Range - Operating  | 0°C to +75°C |



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**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**

[41662Series](#)

**Mates With**

[2139](#) , [2145](#) , [6442](#) , [7674](#) , [7675](#) , [41695](#) , [41815](#)

Termination Interface: Style Through Hole

**Electrical**

Current - Maximum per Contact 7A  
Voltage - Maximum 250V

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 5  
Lead-free Process Capability Wave Capable (TH only)  
Max. Cycles at Max. Process Temperature 1  
Process Temperature max. C 235

**Material Info**

Old Part Number A-41662-B07Y228

**Reference - Drawing Numbers**

Product Specification PS-08-50  
Sales Drawing SD-41662-001

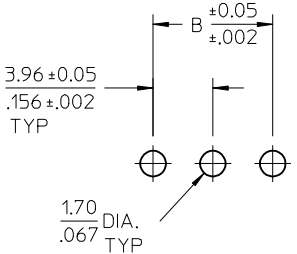
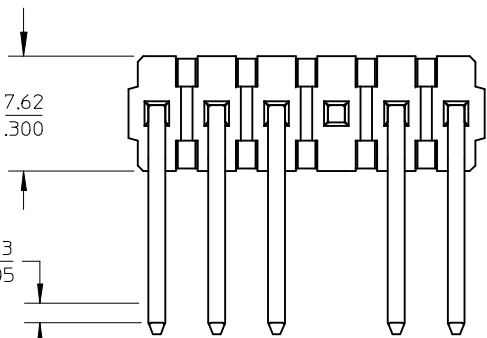
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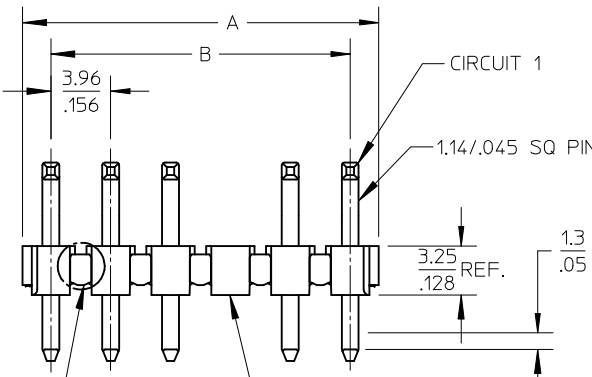
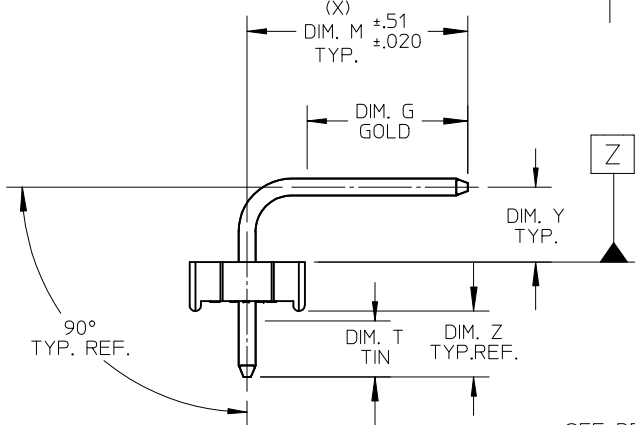
A-41662-\* N \* \* - \*  
 PACKAGING AND OPTIONS  
 NO. OF CKTS.  
 PIN DIMENSIONS  
 PLATING

VOID LOCATIONS:  
 BLANK = NO VOIDS  
 NO.= CKT NO. VOIDED  
 MULT. VOIDS START WITH 51

CENTERLINE OF PIN IN AREA SHOWN NOT TO VARY FROM CENTERLINE OF PIN AT DATUM Z BY MORE THAN 0.20/.008 IN ANY DIRECTION.



PCB LAYOUT: COMPONENT SIDE  
 RECOMMENDED PCB THICKNESS:  
 (1.57 ± .18) / .062 ± .007



1.3 CENTERLINE OF PIN IN AREA SHOWN NOT TO VARY FROM CENTERLINE OF PIN AT DATUM Z BY MORE THAN 0.13/.005 IN ANY DIRECTION.

SEE DETAIL A  
 OPTIONAL VOIDED CKT. SEE CHART FOR LOCATIONS

| CIRCUIT | B              | A                          |
|---------|----------------|----------------------------|
| 2       | 3.96<br>.156   | 6.78/7.87<br>.2677/.310    |
| 3       | 7.92<br>.312   | 10.74/11.84<br>.4231/.466  |
| 4       | 11.89<br>.468  | 14.71/15.80<br>.5791/.622  |
| 5       | 15.85<br>.624  | 18.67/19.76<br>.7351/.778  |
| 6       | 19.81<br>.780  | 22.63/23.72<br>.8917/.934  |
| 7       | 23.77<br>.936  | 26.59/27.69<br>1.047/1.090 |
| 8       | 27.74<br>1.092 | 30.56/31.65<br>1.203/1.246 |
| 9       | 31.70<br>1.248 | 34.52/35.61<br>1.359/1.402 |
| 10      | 35.66<br>1.404 | 38.48/39.57<br>1.515/1.558 |
| 11      | 39.62<br>1.560 | 42.44/43.54<br>1.671/1.714 |
| 12      | 43.59<br>1.716 | 46.41/47.50<br>1.827/1.870 |
| 13      | 47.55<br>1.872 | 50.37/51.46<br>1.983/2.026 |
| 14      | 51.51<br>2.028 | 54.33/55.42<br>2.139/2.182 |
| 15      | 55.47<br>2.184 | 58.29/59.39<br>2.295/2.338 |
| 16      | 59.44<br>2.340 | 62.26/63.35<br>2.451/2.494 |
| 17      | 63.40<br>2.496 | 66.22/67.31<br>2.607/2.650 |
| 18      | 67.36<br>2.652 | 70.18/71.27<br>2.763/2.806 |
| 19      | 71.32<br>2.808 | 74.14/75.23<br>2.919/2.962 |
| 20      | 75.29<br>2.964 | 78.11/79.20<br>3.075/3.118 |
| 21      | 79.25<br>3.120 | 82.07/83.16<br>3.231/3.274 |
| 22      | 83.21<br>3.276 | 86.03/87.12<br>3.387/3.430 |
| 23      | 87.17<br>3.432 | 89.94/91.08<br>3.541/3.586 |
| 24      | 91.14<br>3.588 | 93.85/95.00<br>3.695/3.740 |

NOTES:

- MATERIAL: GLASS FILLED POLYESTER, 94V-0, MOLDED BLACK
- FINISH: PER SDES-88
  - (102) OVERALL TIN: 0.00508/.000200 MIN.
  - OVERALL COPPER UNDERPLATE: 0.00254/.000100 MIN.
  - (154) OVERALL TIN: 0.00254/.000100 MIN.
  - OVERALL NICKEL UNDERPLATE: 0.00127/.000050 MIN.
  - (208) SELECT GOLD: 0.00038/.000015 MIN.
  - \* SELECT TIN: 0.00254/.000100 MIN
  - OVERALL NICKEL UNDERPLATE: 0.00127/.000050 MIN.
  - (228) SELECT GOLD: 0.00076/.000030 MIN.
  - \* SELECT TIN: 0.00254/.000100 MIN.
  - OVERALL NICKEL UNDERPLATE: 0.00127/.000050 MIN.
  - (501) OVERALL GOLD: 0.00051/.000020 MIN.
  - OVERALL NICKEL UNDERPLATE: 0.00076/.000030 MIN.

- PRODUCT SPECIFICATION: PS-08-50.
- PACKAGING INFORMATION: SEE CHARTS
- SOLDERABILITY: PER SMES-152.
- PIN PUSH-OUT FORCE: PRIOR TO SOLDERING, A 3 LB. MINIMUM FORCE (IN EITHER DIRECTION) SHALL BE REQUIRED TO PUSH THE PIN OUT OF THE HEADER.
- PARTS ARE STACKABLE END TO END ON 3.96/.156 CENTERS. (SPACING TABS MUST BE REMOVED ON CIRCUIT SIZES 1-23 BEFORE PARTS ARE STACKABLE.)
- THE PRIMARY SHIPPING CARTON WILL BE LABELED, "COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH TIN-LEAD PLATING.
- THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

|      |      |
|------|------|
| 2-*  | AH7  |
| 1    | REV. |
| SHT. | REV. |

|  |  |                                       |   |              |              |                        |
|--|--|---------------------------------------|---|--------------|--------------|------------------------|
| REMOVE 41662-0684<br>EC NO: UCP2010-0149<br>DRWN:MKLIPPER 2009/08/05<br>CHK'D:SSOUSEK 2009/08/10<br>APPR:FSM TH 2009/08/11 | QUALITY SYMBOLS                                      | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE   | SCALE        | DESIGN UNITS | THIRD ANGLE PROJECTION |
|  | ▽=0  | mm INCH                               | MM/IN   | 4:1          | INCH         | ☉                      |
|  | ∇=0  | 4 PLACES ± --- ± ---                  | DRAWN BY DATE   |              |              |                        |
|  |  | 3 PLACES ± --- ± .010                 | CHECKED BY DATE   |              |              |                        |
|  | 2 PLACES ± 0.25 ± .014                               | APPROVED BY DATE                      |   |              |              |                        |
|  | 1 PLACE ± 0.36 ± ---                                 | MATERIAL NO.                          |   |              |              |                        |
|  | ANGULAR ± 1/2°                                       |                                       |   |              |              |                        |
|  | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS |                                       |   |              |              |                        |
| AH7  | REV  | SIZE                                  | SEE CHART   | DOCUMENT NO. |              | SHEET NO.              |
|  |  | A                                     | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | SD-41662-001 |              | 1 OF 12                |

