

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0022281055](#)
Status: **Active**
Description: 2.54mm (.100") Pitch KK® Header, Breakaway, Right Angle, with Friction Lock, 5 Circuits, 0.76µm (30µ") Gold (Au) Selective Plating, with Kinked PC Tails

Documents:

| | |
|---|--|
| 3D Model | Product Specification PS-10-07 (PDF) |
| Packaging Specification (PDF) | RoHS Certificate of Compliance (PDF) |
| Drawing (PDF) | |

Agency Certification

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

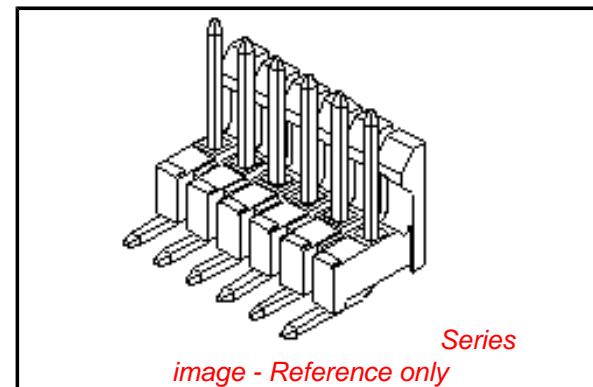
General

| | |
|----------------|-----------------------|
| Product Family | PCB Headers |
| Series | 42228 |
| Application | Wire-to-Board |
| Product Name | KK® |

Physical

| | |
|--------------------------------|--------------|
| Breakaway | Yes |
| Circuits (Loaded) | 5 |
| Circuits (maximum) | 5 |
| Color - Resin | Black |
| Durability (mating cycles max) | 100 |
| Flammability | 94V-0 |
| Glow-Wire Compliant | No |
| Lock to Mating Part | Yes |
| Material - Metal | Brass |
| Material - Plating Mating | Gold |
| Material - Plating Termination | Tin |
| Material - Resin | Nylon |
| Number of Rows | 1 |
| Orientation | Right Angle |
| PC Tail Length (in) | 0.120 In |
| PC Tail Length (mm) | 3.05 mm |
| PCB Locator | No |
| PCB Retention | Yes |
| PCB Thickness Recommended (in) | 0.062 In |
| PCB Thickness Recommended (mm) | 1.60 mm |
| Packaging Type | Bag |
| Pitch - Mating Interface (in) | 0.100 In |
| Pitch - Mating Interface (mm) | 2.54 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 |
| Termination Interface: Style | Through Hole |

Electrical



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

[42228Series](#)

Mates With

[2695](#) , [6471](#) , [7880](#) , [4455](#) , [7720](#)

| | |
|-------------------------------|------|
| Current - Maximum per Contact | 4A |
| 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 | 42228-0180 |
|-----------------|------------|

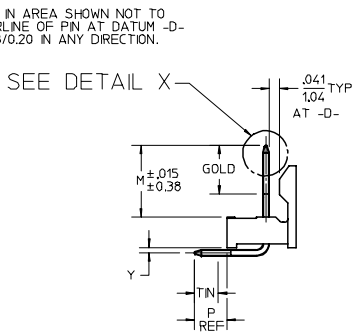
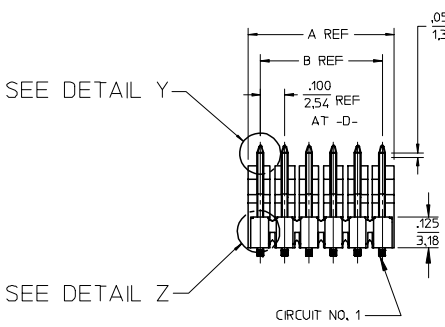
Reference - Drawing Numbers

| | |
|-----------------------|----------------------------|
| Product Specification | PS-10-07 |
| Sales Drawing | SD-42228-001, SD-42228-002 |

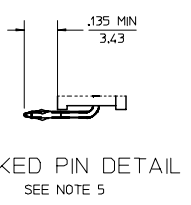
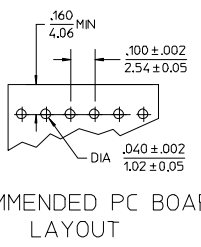
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| CKTS | DM A | DM B |
|------|-------------|-------------|
| 2 | .200/5.08 | .100/2.54 |
| 3 | .300/7.62 | .200/5.08 |
| 4 | .400/10.16 | .300/7.62 |
| 5 | .500/12.70 | .400/10.16 |
| 6 | .600/15.24 | .500/12.70 |
| 7 | .700/17.78 | .600/15.24 |
| 8 | .800/20.32 | .700/17.78 |
| 9 | .900/22.86 | .800/20.32 |
| 10 | 1.000/25.40 | .900/22.86 |
| 11 | 1.100/27.94 | 1.000/25.40 |
| 12 | 1.200/30.48 | 1.100/27.94 |
| 13 | 1.300/33.02 | 1.200/30.48 |
| 14 | 1.400/35.56 | 1.300/33.02 |
| 15 | 1.500/38.10 | 1.400/35.56 |
| 16 | 1.600/40.64 | 1.500/38.10 |
| 17 | 1.700/43.18 | 1.600/40.64 |
| 18 | 1.800/45.72 | 1.700/43.18 |
| 19 | 1.900/48.26 | 1.800/45.72 |
| 20 | 2.000/50.80 | 1.900/48.26 |
| 21 | 2.100/53.34 | 2.000/50.80 |
| 22 | 2.200/55.88 | 2.100/53.34 |
| 23 | 2.300/58.42 | 2.200/55.88 |
| 24 | 2.400/60.96 | 2.300/58.42 |
| 25 | 2.500/63.50 | 2.400/60.96 |
| 26 | 2.600/66.04 | 2.500/63.50 |
| 27 | 2.700/68.58 | 2.600/66.04 |
| 28 | 2.800/71.12 | 2.700/68.58 |
| 29 | 2.900/73.66 | 2.800/71.12 |
| 30 | 3.000/76.20 | 2.900/73.66 |
| 31 | 3.100/78.74 | 3.000/76.20 |
| 32 | 3.200/81.28 | 3.100/78.74 |
| 33 | 3.300/83.82 | 3.200/81.28 |
| 34 | 3.400/86.36 | 3.300/83.82 |
| 35 | 3.500/88.90 | 3.400/86.36 |
| 36 | 3.600/91.44 | 3.500/88.90 |



- NOTES:
- MATERIAL: GLASS FILLED NYLON, 94V-0, COLOR: BLACK
 - FINISH:
 - (154) *OVERALL TIN: .000100/0.00254 MIN. OVER .000050/0.00127 MIN NICKEL.
 - (208) SELECT GOLD: .000015/0.00038 MIN. *SELECT TIN: .000100/0.00254 MIN. OVERALL NICKEL UNDERPLATE: .000050/0.00127 MIN.
 - (228) SELECT GOLD: .000030/0.00076 MIN. *SELECT TIN: .000100/0.00254 MIN. OVERALL NICKEL UNDERPLATE: .000050/0.00127 MIN.
 - PRODUCT SPECIFICATION: PS-10-07.
 - PACKAGING INFORMATION: SEE TABLES
 - KINK PIN SPECIFICATION: SEE SMES-42003
 - HEADERS ARE NOT STACKABLE ON .100/2.54 CENTERS.
 - SOLDERABILITY PER SMES-152.
 - PN PUSH OUT FORCE: 3 LBS. MIN.
 - ABRASION MARKS ON BACK WALL SURFACE ARE PERMISSIBLE.



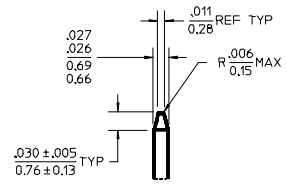
| REV | DESCRIPTION | DATE | BY |
|-----|---------------------|------------|-----|
| L4 | ADD NOTE 9 | 2006/02/07 | UCP |
| | EC NO: UCP2006-1710 | 2006/02/07 | UCP |
| | DRWN: ADERR | 2006/02/07 | UCP |
| | CHKD: LSCHEM1 DT | 2006/02/07 | UCP |
| | APPR: FSWI TH | 2006/02/07 | UCP |

| QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | |
|-----------------|---------------------------------------|--------|
| | mm | INCH |
| ▽=0 | 4 PLACES ± --- | ± --- |
| ▽=0 | 3 PLACES ± --- | ± .010 |
| | 2 PLACES ± 0.25 | ± .014 |
| | 1 PLACE ± 0.36 | ± --- |
| | ANGULAR ± 1/2° | |

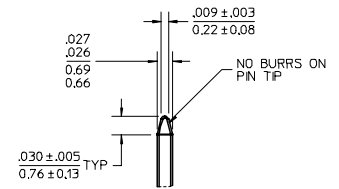
| DIMENSION STYLE | | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION |
|-----------------|------------|--|--------------|------------------------|
| IN/MM | IN/MM | 2:1 | INCH | THIRD ANGLE PROJECTION |
| DRAWN BY | DATE | TITLE | | |
| JSCHAFFER | 2004/03/18 | .100 FRICTION LOCK BREAKAWAY HEADER ASSY | | |
| CHECKED BY | DATE | MATERIAL NO. | | |
| KSAMIEC | 2004/03/18 | SEE CHART | | |
| APPROVED BY | DATE | DOCUMENT NO. | | |
| MARGULIS | 2004/03/18 | SD-42228-001 | | |

| MATERIAL NO. | | DOCUMENT NO. | SHEET NO. |
|---|--|--------------|-----------|
| SEE CHART | | SD-42228-001 | 1 OF 4 |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | |

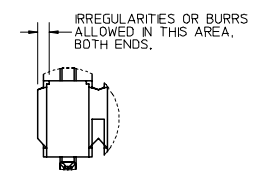
| CKTS | DM A | DM B |
|------|-------------|-------------|
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| 35 | 3.500/88.90 | 3.400/86.36 |
| 36 | 3.600/91.44 | 3.500/88.90 |



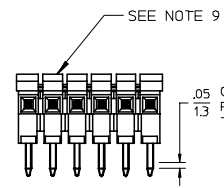
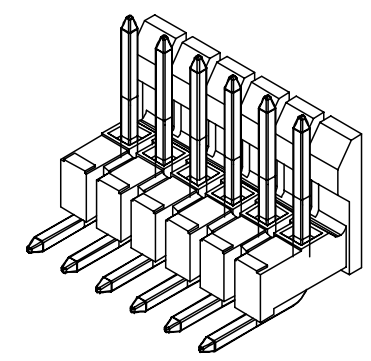
DETAIL X
SCALE 5:1



DETAIL Y
SCALE 5:1

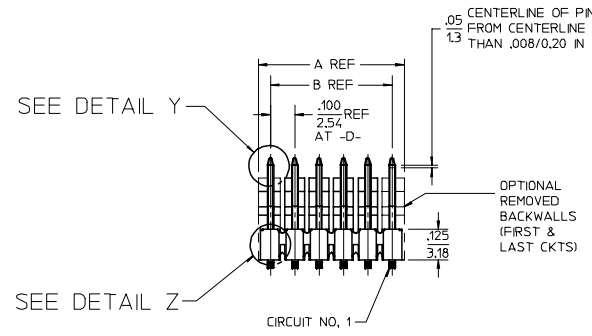


DETAIL Z
SCALE 5:1



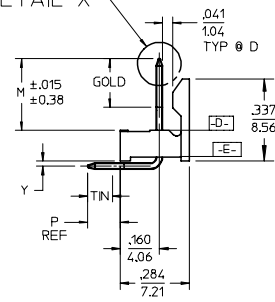
SEE DETAIL Y

SEE DETAIL X



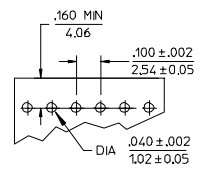
SEE DETAIL Z

CIRCUIT NO. 1

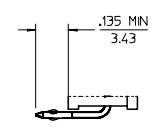


- NOTES:
- MATERIAL: GLASS FILLED NYLON, 94V-0, COLOR: BLACK
 - FINISH:
 - (154) *OVERALL TIN: .000100/0.00254 MIN, OVER .000050/0.00127 MN NICKEL.
 - (208) SELECT GOLD: .000015/0.00038 MIN, *SELECT TIN: .000100/0.00254 MIN, OVERALL NICKEL UNDERPLATE: .000050/0.00127 MN.
 - (228) SELECT GOLD: .000030/0.00076 MIN, *SELECT TIN: .000100/0.00254 MIN, OVERALL NICKEL UNDERPLATE: .000050/0.00127 MN.
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 - PACKAGING INFORMATION: SEE TABLES
 - KINK PIN SPECIFICATION: SEE SMES-42003
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 - SOLDERABILITY PER SMES-152.
 - PIN PUSH OUT FORCE: 3 LBS. MIN.
 - ABRASION MARKS ON BACK WALL SURFACE ARE PERMISSIBLE.

| | |
|-----|-----|
| 2-- | L |
| 1 | L4 |
| SHT | REV |



RECOMMENDED PC BOARD LAYOUT



KINKED PIN DETAIL
SEE NOTE 5

| | | |
|------------|---------------------|------------|
| ADD NOTE 9 | EC NO: UCP2006-1710 | 2006/02/01 |
| | DRW: ADERR | 2006/02/02 |
| | CHKD: LSCHM1DT | 2006/02/02 |
| | APPR: FSWJTH | 2006/02/06 |
| REV | DESCRIPTION | |
| L4 | | |

| |
|-----------------|
| QUALITY SYMBOLS |
| ▽=0 |
| ▽=0 |

| GENERAL TOLERANCES (UNLESS SPECIFIED) | |
|--|--------|
| | INCH |
| 4 PLACES | ± .010 |
| 3 PLACES | ± .014 |
| 2 PLACES | ± .025 |
| 1 PLACE | ± .036 |
| ANGULAR ±1/2° | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | |

| DIMENSION STYLE | |
|-----------------|------------|
| IN/MM | |
| DRAWN BY | DATE |
| JSCHAFFER | 2004/03/18 |
| CHECKED BY | DATE |
| KSAMIEC | 2004/03/18 |
| APPROVED BY | DATE |
| MARGULIS | 2004/03/18 |
| MATERIAL NO. | SEE CHART |

| | |
|---|--------------|
| SCALE | 2:1 |
| DESIGN UNITS | INCH |
| THIRD ANGLE PROJECTION | |
| TITLE | |
| .100 FRICTION LOCK BREAKAWAY HEADER ASSY | |
| MATERIAL NO. | |
| SEE CHART | |
| DOCUMENT NO. | SD-42228-002 |
| SHEET NO. | 1 OF 6 |
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