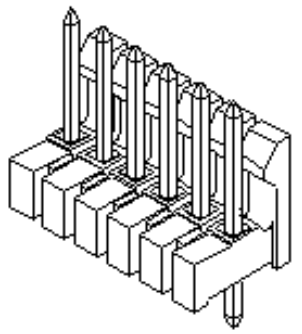
This document was generated on 03/21/2010

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

**Part Number:** 0022280031

**Status:** Active

**Description:** 2.54mm (.100") Pitch KK® Header, Breakaway, Vertical, with Friction Lock, 3 Circuits, 0.38µm (15µ") Gold (Au) Selective Plating



*Series image - Reference only*

**Documents:**

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

## Agency Certification

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

## General

| | |
|---|---|
| Product Family | PCB Headers |
| Series | 42227 |
| Application | Wire-to-Board |
| Product Name | KK® |

## Physical

| | |
|---|---|
| Breakaway | Yes |
| Circuits (Loaded) | 3 |
| Circuits (maximum) | 3 |
| 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 | Vertical |
| PC Tail Length (in) | 0.120 In |
| PC Tail Length (mm) | 3.05 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) | 0.100 In |
| Pitch - Mating Interface (mm) | 2.54 mm |
| Plating min: Mating (µin) | 15 |
| Plating min: Mating (µm) | 0.375 |
| Plating min: Termination (µin) | 100 |
| Plating min: Termination (µm) | 2.5 |
| Polarized to Mating Part | No |
| Polarized to PCB | No |
| Shrouded | No |
| 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 Halogen-Free**

**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**
42227Series

**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 | 42227-0038 |

## Reference - Drawing Numbers

| | |
|---|---|
| Product Specification | PS-10-07 |
| Sales Drawing | SD-42227-001 |

This document was generated on 03/21/2010

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

| A-42227-0002/0036 | |
|---|---|
| HEADER NUMBER: | 41411 |
| PIN NUMBER: | 42663-AXA154 |
| PIN LENGTH: L | .540/13.72 |
| MATING LENGTH: M | .295/7.49 |
| GOLD POINT: G | N/A |
| PC TAIL LENGTH: P | .120/3.05 |
| TIN: T | OVERALL |
| CKTS: | 2-36 |
| KINKS: | NO |
| REMOVED BACKWALLS: | NO |
| VOIDED CKTS: | NONE |
| PACKAGING: | BULK 40873-0056 |

| CKTS | MATERIAL NUMBER | ENG NUMBER | CKTS | MATERIAL NUMBER | ENG NUMBER |
|---|---|---|---|---|---|
| 02 | 22-28-0020 | A-42227-0002 | 20 | 22-28-0200 | A-42227-0020 |
| 03 | 22-28-0030 | A-42227-0003 | 21 | 22-28-0210 | A-42227-0021 |
| 04 | 22-28-0040 | A-42227-0004 | 22 | 22-28-0220 | A-42227-0022 |
| 05 | 22-28-0050 | A-42227-0005 | 23 | 22-28-0230 | A-42227-0023 |
| 06 | 22-28-0060 | A-42227-0006 | 24 | 22-28-0240 | A-42227-0024 |
| 07 | 22-28-0070 | A-42227-0007 | 25 | 22-28-0250 | A-42227-0025 |
| 08 | 22-28-0080 | A-42227-0008 | 26 | 22-28-0260 | A-42227-0026 |
| 09 | 22-28-0090 | A-42227-0009 | 27 | 22-28-0270 | A-42227-0027 |
| 10 | 22-28-0100 | A-42227-0010 | 28 | 22-28-0280 | A-42227-0028 |
| 11 | 22-28-0110 | A-42227-0011 | 29 | 22-28-0290 | A-42227-0029 |
| 12 | 22-28-0120 | A-42227-0012 | 30 | 22-28-0300 | A-42227-0030 |
| 13 | 22-28-0130 | A-42227-0013 | 31 | 22-28-0310 | A-42227-0031 |
| 14 | 22-28-0140 | A-42227-0014 | 32 | 22-28-0320 | A-42227-0032 |
| 15 | 22-28-0150 | A-42227-0015 | 33 | 22-28-0330 | A-42227-0033 |
| 16 | 22-28-0160 | A-42227-0016 | 34 | 22-28-0340 | A-42227-0034 |
| 17 | 22-28-0170 | A-42227-0017 | 35 | 22-28-0350 | A-42227-0035 |
| 18 | 22-28-0180 | A-42227-0018 | 36 | 22-28-0360 | A-42227-0036 |
| 19 | 22-28-0190 | A-42227-0019 | | | |

| A-42227-0037/0071 | |
|---|---|
| HEADER NUMBER: | 41411 |
| PIN NUMBER: | 42663-AXB208 |
| PIN LENGTH: L | .540/13.72 |
| MATING LENGTH: M | .295/7.49 |
| GOLD POINT: G | .180/4.57 |
| PC TAIL LENGTH: P | .120/3.05 |
| TIN: T | .135/3.43 |
| CKTS: | 2-36 |
| KINKS: | NO |
| REMOVED BACKWALLS: | NO |
| VOIDED CKTS: | NONE |
| PACKAGING: | BULK 40873-0056 |

| CKTS | MATERIAL NUMBER | ENG NUMBER | CKTS | MATERIAL NUMBER | ENG NUMBER |
|---|---|---|---|---|---|
| 02 | 22-28-0021 | A-42227-0037 | 20 | 22-28-0201 | A-42227-0055 |
| 03 | 22-28-0031 | A-42227-0038 | 21 | 22-28-0211 | A-42227-0056 |
| 04 | 22-28-0041 | A-42227-0039 | 22 | 22-28-0221 | A-42227-0057 |
| 05 | 22-28-0051 | A-42227-0040 | 23 | 22-28-0231 | A-42227-0058 |
| 06 | 22-28-0061 | A-42227-0041 | 24 | 22-28-0241 | A-42227-0059 |
| 07 | 22-28-0071 | A-42227-0042 | 25 | 22-28-0251 | A-42227-0060 |
| 08 | 22-28-0081 | A-42227-0043 | 26 | 22-28-0261 | A-42227-0061 |
| 09 | 22-28-0091 | A-42227-0044 | 27 | 22-28-0271 | A-42227-0062 |
| 10 | 22-28-0101 | A-42227-0045 | 28 | 22-28-0281 | A-42227-0063 |
| 11 | 22-28-0111 | A-42227-0046 | 29 | 22-28-0291 | A-42227-0064 |
| 12 | 22-28-0121 | A-42227-0047 | 30 | 22-28-0301 | A-42227-0065 |
| 13 | 22-28-0131 | A-42227-0048 | 31 | 22-28-0311 | A-42227-0066 |
| 14 | 22-28-0141 | A-42227-0049 | 32 | 22-28-0321 | A-42227-0067 |
| 15 | 22-28-0151 | A-42227-0050 | 33 | 22-28-0331 | A-42227-0068 |
| 16 | 22-28-0161 | A-42227-0051 | 34 | 22-28-0341 | A-42227-0069 |
| 17 | 22-28-0171 | A-42227-0052 | 35 | 22-28-0351 | A-42227-0070 |
| 18 | 22-28-0181 | A-42227-0053 | 36 | 22-28-0361 | A-42227-0071 |
| 19 | 22-28-0191 | A-42227-0054 | | | |

| REV: | | TITLE: | SHEET No. |
|---|---|---|---|
| **K** | **SEE SHEET 1** | .100 FRICTION LOCK BREAKAWAY HEADER ASSY. | **- 2 -** |

| DOCUMENT NUMBER: | CREATED / REVISED BY: | CHECKED BY: | APPROVED BY: |
|---|---|---|---|
| **SD- 42227 -001** | **S. LINEHAN 03/04/2004** | **K.SAMIEC 03/04/2004** | **Y. MARGULIS 03/04/2004** |

| A-42227-0072/0106 | |
|---|---|
| HEADER NUMBER: | 41411 |
| PIN NUMBER: | 42663-AXB228 |
| PIN LENGTH: L | .540/13.72 |
| MATING LENGTH: M | .295/7.49 |
| GOLD POINT: G | .180/4.57 |
| PC TAIL LENGTH: P | .120/3.05 |
| TIN: T | .135/3.43 |
| CKTS: | 2-36 |
| KINKS: | NO |
| REMOVED BACKWALLS: | NO |
| VOIDED CKTS: | NONE |
| PACKAGING: | BULK 40873-0056 |

| CKTS | MATERIAL NUMBER | ENG NUMBER | CKTS | MATERIAL NUMBER | ENG NUMBER |
|---|---|---|---|---|---|
| 02 | 22-28-0022 | A-42227-0072 | 20 | 22-28-0202 | A-42227-0090 |
| 03 | 22-28-0032 | A-42227-0073 | 21 | 22-28-0212 | A-42227-0091 |
| 04 | 22-28-0042 | A-42227-0074 | 22 | 22-28-0222 | A-42227-0092 |
| 05 | 22-28-0052 | A-42227-0075 | 23 | 22-28-0232 | A-42227-0093 |
| 06 | 22-28-0062 | A-42227-0076 | 24 | 22-28-0242 | A-42227-0094 |
| 07 | 22-28-0072 | A-42227-0077 | 25 | 22-28-0252 | A-42227-0095 |
| 08 | 22-28-0082 | A-42227-0078 | 26 | 22-28-0262 | A-42227-0096 |
| 09 | 22-28-0092 | A-42227-0079 | 27 | 22-28-0272 | A-42227-0097 |
| 10 | 22-28-0102 | A-42227-0080 | 28 | 22-28-0282 | A-42227-0098 |
| 11 | 22-28-0112 | A-42227-0081 | 29 | 22-28-0292 | A-42227-0099 |
| 12 | 22-28-0122 | A-42227-0082 | 30 | 22-28-0302 | A-42227-0100 |
| 13 | 22-28-0132 | A-42227-0083 | 31 | 22-28-0312 | A-42227-0101 |
| 14 | 22-28-0142 | A-42227-0084 | 32 | 22-28-0322 | A-42227-0102 |
| 15 | 22-28-0152 | A-42227-0085 | 33 | 22-28-0332 | A-42227-0103 |
| 16 | 22-28-0162 | A-42227-0086 | 34 | 22-28-0342 | A-42227-0104 |
| 17 | 22-28-0172 | A-42227-0087 | 35 | 22-28-0352 | A-42227-0105 |
| 18 | 22-28-0182 | A-42227-0088 | 36 | 22-28-0362 | A-42227-0106 |
| 19 | 22-28-0192 | A-42227-0089 | | | |

| A-42227-0107/0141 | |
|---|---|
| HEADER NUMBER: | 41411 |
| PIN NUMBER: | 42663-BAA154 |
| PIN LENGTH: L | .555/14.10 |
| MATING LENGTH: M | .295/7.49 |
| GOLD POINT: G | N/A |
| PC TAIL LENGTH: P | .135/3.43 |
| TIN: T | OVERALL |
| CKTS: | 2-36 |
| KINKS: | YES |
| REMOVED BACKWALLS: | NO |
| VOIDED CKTS: | NONE |
| PACKAGING: | BULK 40873-0056 |

| CKTS | MATERIAL NUMBER | ENG NUMBER | CKTS | MATERIAL NUMBER | ENG NUMBER |
|---|---|---|---|---|---|
| 02 | 22-28-0023 | A-42227-0107 | 20 | 22-28-0203 | A-42227-0125 |
| 03 | 22-28-0033 | A-42227-0108 | 21 | 22-28-0213 | A-42227-0126 |
| 04 | 22-28-0043 | A-42227-0109 | 22 | 22-28-0223 | A-42227-0127 |
| 05 | 22-28-0053 | A-42227-0110 | 23 | 22-28-0233 | A-42227-0128 |
| 06 | 22-28-0063 | A-42227-0111 | 24 | 22-28-0243 | A-42227-0129 |
| 07 | 22-28-0073 | A-42227-0112 | 25 | 22-28-0253 | A-42227-0130 |
| 08 | 22-28-0083 | A-42227-0113 | 26 | 22-28-0263 | A-42227-0131 |
| 09 | 22-28-0093 | A-42227-0114 | 27 | 22-28-0273 | A-42227-0132 |
| 10 | 22-28-0103 | A-42227-0115 | 28 | 22-28-0283 | A-42227-0133 |
| 11 | 22-28-0113 | A-42227-0116 | 29 | 22-28-0293 | A-42227-0134 |
| 12 | 22-28-0123 | A-42227-0117 | 30 | 22-28-0303 | A-42227-0135 |
| 13 | 22-28-0133 | A-42227-0118 | 31 | 22-28-0313 | A-42227-0136 |
| 14 | 22-28-0143 | A-42227-0119 | 32 | 22-28-0323 | A-42227-0137 |
| 15 | 22-28-0153 | A-42227-0120 | 33 | 22-28-0333 | A-42227-0138 |
| 16 | 22-28-0163 | A-42227-0121 | 34 | 22-28-0343 | A-42227-0139 |
| 17 | 22-28-0173 | A-42227-0122 | 35 | 22-28-0353 | A-42227-0140 |
| 18 | 22-28-0183 | A-42227-0123 | 36 | 22-28-0363 | A-42227-0141 |
| 19 | 22-28-0193 | A-42227-0124 | | | |

| REV: | | TITLE: | SHEET No. |
|---|---|---|---|
| **K** | **SEE SHEET 1** | .100 FRICTION LOCK BREAKAWAY HEADER ASSY. | **- 3 -** |

| DOCUMENT NUMBER: | CREATED / REVISED BY: | CHECKED BY: | APPROVED BY: |
|---|---|---|---|
| **SD- 42227 -001** | **S. LINEHAN 03/04/2004** | **K.SAMIEC 03/04/2004** | **Y. MARGULIS 03/04/2004** |

| A-42227-0142/0176 | |
|---|---|
| HEADER NUMBER: | 41411 |
| PIN NUMBER: | 42663-BAB208 |
| PIN LENGTH: L | .555/14.10 |
| MATING LENGTH: M | .295/7.49 |
| GOLD POINT: G | .180/4.57 |
| PC TAIL LENGTH: P | .135/3.43 |
| TIN: T | .135/3.43 |
| CKTS: | 2-36 |
| KINKS: | YES |
| REMOVED BACKWALLS: | NO |
| VOIDED CKTS: | NONE |
| PACKAGING: | BULK 40873-0056 |

| CKTS | MATERIAL NUMBER | ENG NUMBER | CKTS | MATERIAL NUMBER | ENG NUMBER |
|---|---|---|---|---|---|
| 02 | 22-28-0024 | A-42227-0142 | 20 | 22-28-0204 | A-42227-0160 |
| 03 | 22-28-0034 | A-42227-0143 | 21 | 22-28-0214 | A-42227-0161 |
| 04 | 22-28-0044 | A-42227-0144 | 22 | 22-28-0224 | A-42227-0162 |
| 05 | 22-28-0054 | A-42227-0145 | 23 | 22-28-0234 | A-42227-0163 |
| 06 | 22-28-0064 | A-42227-0146 | 24 | 22-28-0244 | A-42227-0164 |
| 07 | 22-28-0074 | A-42227-0147 | 25 | 22-28-0254 | A-42227-0165 |
| 08 | 22-28-0084 | A-42227-0148 | 26 | 22-28-0264 | A-42227-0166 |
| 09 | 22-28-0094 | A-42227-0149 | 27 | 22-28-0274 | A-42227-0167 |
| 10 | 22-28-0104 | A-42227-0150 | 28 | 22-28-0284 | A-42227-0168 |
| 11 | 22-28-0114 | A-42227-0151 | 29 | 22-28-0294 | A-42227-0169 |
| 12 | 22-28-0124 | A-42227-0152 | 30 | 22-28-0304 | A-42227-0170 |
| 13 | 22-28-0134 | A-42227-0153 | 31 | 22-28-0314 | A-42227-0171 |
| 14 | 22-28-0144 | A-42227-0154 | 32 | 22-28-0324 | A-42227-0172 |
| 15 | 22-28-0154 | A-42227-0155 | 33 | 22-28-0334 | A-42227-0173 |
| 16 | 22-28-0164 | A-42227-0156 | 34 | 22-28-0344 | A-42227-0174 |
| 17 | 22-28-0174 | A-42227-0157 | 35 | 22-28-0354 | A-42227-0175 |
| 18 | 22-28-0184 | A-42227-0158 | 36 | 22-28-0364 | A-42227-0176 |
| 19 | 22-28-0194 | A-42227-0159 | | | |

| A-42227-0177/0211 | |
|---|---|
| HEADER NUMBER: | 41411 |
| PIN NUMBER: | 42663-BAB228 |
| PIN LENGTH: L | .555/14.10 |
| MATING LENGTH: M | .295/7.49 |
| GOLD POINT: G | .180/4.57 |
| PC TAIL LENGTH: P | .135/3.43 |
| TIN: T | .135/3.43 |
| CKTS: | 2-36 |
| KINKS: | YES |
| REMOVED BACKWALLS: | NO |
| VOIDED CKTS: | NONE |
| PACKAGING: | BULK 40873-0056 |

| CKTS | MATERIAL NUMBER | ENG NUMBER | CKTS | MATERIAL NUMBER | ENG NUMBER |
|---|---|---|---|---|---|
| 02 | 22-28-0025 | A-42227-0177 | 20 | 22-28-0205 | A-42227-0195 |
| 03 | 22-28-0035 | A-42227-0178 | 21 | 22-28-0215 | A-42227-0196 |
| 04 | 22-28-0045 | A-42227-0179 | 22 | 22-28-0225 | A-42227-0197 |
| 05 | 22-28-0055 | A-42227-0180 | 23 | 22-28-0235 | A-42227-0198 |
| 06 | 22-28-0065 | A-42227-0181 | 24 | 22-28-0245 | A-42227-0199 |
| 07 | 22-28-0075 | A-42227-0182 | 25 | 22-28-0255 | A-42227-0200 |
| 08 | 22-28-0085 | A-42227-0183 | 26 | 22-28-0265 | A-42227-0201 |
| 09 | 22-28-0095 | A-42227-0184 | 27 | 22-28-0275 | A-42227-0202 |
| 10 | 22-28-0105 | A-42227-0185 | 28 | 22-28-0285 | A-42227-0203 |
| 11 | 22-28-0115 | A-42227-0186 | 29 | 22-28-0295 | A-42227-0204 |
| 12 | 22-28-0125 | A-42227-0187 | 30 | 22-28-0305 | A-42227-0205 |
| 13 | 22-28-0135 | A-42227-0188 | 31 | 22-28-0315 | A-42227-0206 |
| 14 | 22-28-0145 | A-42227-0189 | 32 | 22-28-0325 | A-42227-0207 |
| 15 | 22-28-0155 | A-42227-0190 | 33 | 22-28-0335 | A-42227-0208 |
| 16 | 22-28-0165 | A-42227-0191 | 34 | 22-28-0345 | A-42227-0209 |
| 17 | 22-28-0175 | A-42227-0192 | 35 | 22-28-0355 | A-42227-0210 |
| 18 | 22-28-0185 | A-42227-0193 | 36 | 22-28-0365 | A-42227-0211 |
| 19 | 22-28-0195 | A-42227-0194 | | | |

| REV: | | TITLE: | SHEET No. |
|---|---|---|---|
| **K** | **SEE SHEET 1** | .100 FRICTION LOCK BREAKAWAY HEADER ASSY. | **- 4 -** |

| DOCUMENT NUMBER: | CREATED / REVISED BY: | CHECKED BY: | APPROVED BY: |
|---|---|---|---|
| **SD- 42227 -001** | **S. LINEHAN 03/04/2004** | **K.SAMIEC 03/04/2004** | **Y. MARGULIS 03/04/2004** |