

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

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

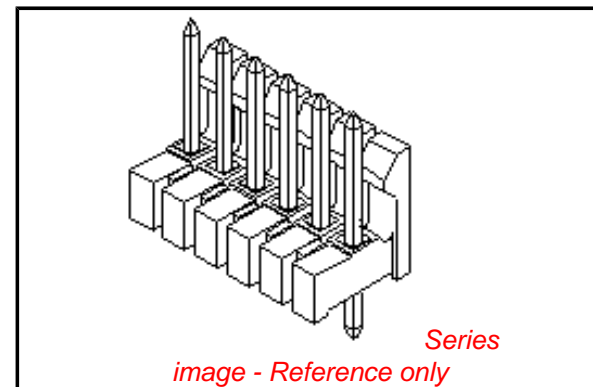
General

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**

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](#)

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|-------------------------------|------|
| 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

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|-----------------|------------|
| 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

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| 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 | | | |

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

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

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

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

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

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