

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0022281212](#)
Status: **Active**
Description: 2.54mm (.100") Pitch KK® Header, Breakaway, Right Angle, with Friction Lock, 21 Circuits, 0.76µm (30µ") Gold (Au) Selective Plating

Documents:

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

Agency Certification

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

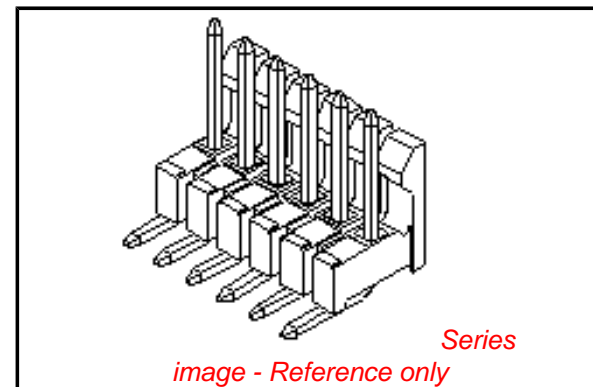
General

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

Physical

| | |
|--------------------------------|--------------|
| Breakaway | Yes |
| Circuits (Loaded) | 21 |
| Circuits (maximum) | 21 |
| 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) | 0.135 In |
| PC Tail Length (mm) | 3.43 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) | 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 Contains SVHC: No
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 | 42228-0091 |
|-----------------|------------|

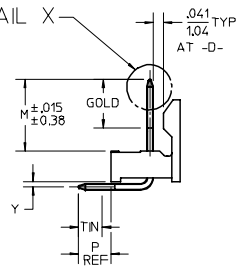
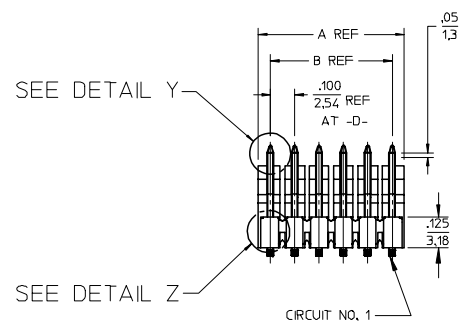
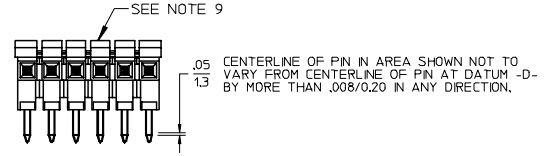
Reference - Drawing Numbers

| | |
|-----------------------|--|
| Product Specification | PS-10-07 |
| Sales Drawing | SD-42228-001, SD-42228-002, SD-42228-003 |

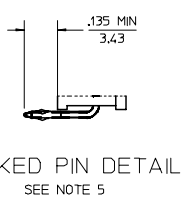
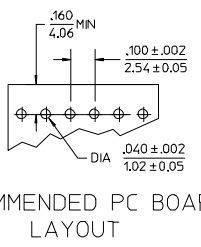
This document was generated on 03/22/2010

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

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

| SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION |
|--|---------------------------|------------------------|
| 2:1 | INCH | ☉ |
| .100 FRICTION LOCK BREAKAWAY HEADER ASSY | | |
| MOLEX MOLEX INCORPORATED | | |
| MATERIAL NO. SEE CHART | DOCUMENT NO. SD-42228-001 | SHEET NO. 1 OF 4 |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | |

| A-42228-0002/0036 | | | | | | A-42228-0037/0071 | | | | | |
|--------------------|-----------------|-----------------|------|-----------------|--------------|--------------------|-----------------|-----------------|------|-----------------|--------------|
| HEADER NUMBER: | | 41411 | | | | HEADER NUMBER: | | 41411 | | | |
| PIN NUMBER: | | 42663-CKA154 | | | | PIN NUMBER: | | 42663-CKB208 | | | |
| PIN LENGTH: L | | .705/17.91 | | | | PIN LENGTH: L | | .705/17.91 | | | |
| MATING LENGTH: M | | .295/7.49 | | | | MATING LENGTH: M | | .295/7.49 | | | |
| GOLD POINT: G | | N/A | | | | GOLD POINT: G | | .140/3.56 | | | |
| PC TAIL LENGTH: P | | .120/3.05 | | | | PC TAIL LENGTH: P | | .120/3.05 | | | |
| TIN: T | | OVERALL | | | | TIN: T | | .135/3.43 | | | |
| DIMENSION Y | | .022/0.56 | | | | DIMENSION Y | | .022/0.56 | | | |
| CKTS: | | 2-36 | | | | CKTS: | | 2-36 | | | |
| KINKS: | | NO | | | | KINKS: | | NO | | | |
| REMOVED BACKWALLS: | | NO | | | | REMOVED BACKWALLS: | | NO | | | |
| VOIDED CKTS: | | NONE | | | | VOIDED CKTS: | | NONE | | | |
| PACKAGING: | | BULK 40873-0056 | | | | PACKAGING: | | BULK 40873-0056 | | | |
| CKTS | MATERIAL NUMBER | ENG NUMBER | CKTS | MATERIAL NUMBER | ENG NUMBER | CKTS | MATERIAL NUMBER | ENG NUMBER | CKTS | MATERIAL NUMBER | ENG NUMBER |
| 02 | 22-28-1020 | A-42228-0002 | 20 | 22-28-1200 | A-42228-0020 | 02 | 22-28-1021 | A-42228-0037 | 20 | 22-28-1201 | A-42228-0055 |
| 03 | 22-28-1030 | A-42228-0003 | 21 | 22-28-1210 | A-42228-0021 | 03 | 22-28-1031 | A-42228-0038 | 21 | 22-28-1211 | A-42228-0056 |
| 04 | 22-28-1040 | A-42228-0004 | 22 | 22-28-1220 | A-42228-0022 | 04 | 22-28-1041 | A-42228-0039 | 22 | 22-28-1221 | A-42228-0057 |
| 05 | 22-28-1050 | A-42228-0005 | 23 | 22-28-1230 | A-42228-0023 | 05 | 22-28-1051 | A-42228-0040 | 23 | 22-28-1231 | A-42228-0058 |
| 06 | 22-28-1060 | A-42228-0006 | 24 | 22-28-1240 | A-42228-0024 | 06 | 22-28-1061 | A-42228-0041 | 24 | 22-28-1241 | A-42228-0059 |
| 07 | 22-28-1070 | A-42228-0007 | 25 | 22-28-1250 | A-42228-0025 | 07 | 22-28-1071 | A-42228-0042 | 25 | 22-28-1251 | A-42228-0060 |
| 08 | 22-28-1080 | A-42228-0008 | 26 | 22-28-1260 | A-42228-0026 | 08 | 22-28-1081 | A-42228-0043 | 26 | 22-28-1261 | A-42228-0061 |
| 09 | 22-28-1090 | A-42228-0009 | 27 | 22-28-1270 | A-42228-0027 | 09 | 22-28-1091 | A-42228-0044 | 27 | 22-28-1271 | A-42228-0062 |
| 10 | 22-28-1100 | A-42228-0010 | 28 | 22-28-1280 | A-42227-0028 | 10 | 22-28-1101 | A-42228-0045 | 28 | 22-28-1281 | A-42228-0063 |
| 11 | 22-28-1110 | A-42228-0011 | 29 | 22-28-1290 | A-42228-0029 | 11 | 22-28-1111 | A-42228-0046 | 29 | 22-28-1291 | A-42228-0064 |
| 12 | 22-28-1120 | A-42228-0012 | 30 | 22-28-1300 | A-42228-0030 | 12 | 22-28-1121 | A-42228-0047 | 30 | 22-28-1301 | A-42228-0065 |
| 13 | 22-28-1130 | A-42228-0013 | 31 | 22-28-1310 | A-42228-0031 | 13 | 22-28-1131 | A-42228-0048 | 31 | 22-28-1311 | A-42228-0066 |
| 14 | 22-28-1140 | A-42228-0014 | 32 | 22-28-1320 | A-42228-0032 | 14 | 22-28-1141 | A-42228-0049 | 32 | 22-28-1321 | A-42228-0067 |
| 15 | 22-28-1150 | A-42228-0015 | 33 | 22-28-1330 | A-42228-0033 | 15 | 22-28-1151 | A-42228-0050 | 33 | 22-28-1331 | A-42228-0068 |
| 16 | 22-28-1160 | A-42228-0016 | 34 | 22-28-1340 | A-42228-0034 | 16 | 22-28-1161 | A-42228-0051 | 34 | 22-28-1341 | A-42228-0069 |
| 17 | 22-28-1170 | A-42228-0017 | 35 | 22-28-1350 | A-42228-0035 | 17 | 22-28-1171 | A-42228-0052 | 35 | 22-28-1351 | A-42228-0070 |
| 18 | 22-28-1180 | A-42228-0018 | 36 | 22-28-1360 | A-42228-0036 | 18 | 22-28-1181 | A-42228-0053 | 36 | 22-28-1361 | A-42228-0071 |
| 19 | 22-28-1190 | A-42228-0019 | | | | 19 | 22-28-1191 | A-42228-0054 | | | |

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|-----------------------|--|------------------------------|--|-------------------------------|--------------|
| REV: | | TITLE: | .100 FRICTION LOCK BREAKAWAY HEADER ASSY. | | SHEET No. |
| L | | | | | - 2 - |
| DOCUMENT NUMBER: | | CREATED / REVISED BY: | CHECKED BY: | APPROVED BY: | |
| SD- 42228 -001 | | S. LINEHAN 03/04/2004 | K.SAMIEC 03/04/2004 | Y. MARGULIS 03/04/2004 | |

| A-42228-0072/0106 | | | | | | A-42228-0107/0141 | | | | | |
|--------------------|-----------------|-----------------|------|-----------------|--------------|--------------------|-----------------|-----------------|------|-----------------|--------------|
| HEADER NUMBER: | | 41411 | | | | HEADER NUMBER: | | 41411 | | | |
| PIN NUMBER: | | 42663-CKB228 | | | | PIN NUMBER: | | 42663-CNA154 | | | |
| PIN LENGTH: L | | .705/17.91 | | | | PIN LENGTH: L | | .720/18.29 | | | |
| MATING LENGTH: M | | .295/7.49 | | | | MATING LENGTH: M | | .295/7.49 | | | |
| GOLD POINT: G | | .140/3.56 | | | | GOLD POINT: G | | N/A | | | |
| PC TAIL LENGTH: P | | .120/3.05 | | | | PC TAIL LENGTH: P | | .135/3.43 | | | |
| TIN: T | | .135/3.43 | | | | TIN: T | | OVERALL | | | |
| DIMENSION Y | | .022/0.56 | | | | DIMENSION Y | | .022/0.56 | | | |
| CKTS: | | 2-36 | | | | CKTS: | | 2-36 | | | |
| KINKS: | | NO | | | | KINKS: | | YES ES-42003 | | | |
| REMOVED BACKWALLS: | | NO | | | | REMOVED BACKWALLS: | | NO | | | |
| VOIDED CKTS: | | NONE | | | | VOIDED CKTS: | | NONE | | | |
| PACKAGING: | | BULK 40873-0056 | | | | PACKAGING: | | BULK 40873-0056 | | | |
| CKTS | MATERIAL NUMBER | ENG NUMBER | CKTS | MATERIAL NUMBER | ENG NUMBER | CKTS | MATERIAL NUMBER | ENG NUMBER | CKTS | MATERIAL NUMBER | ENG NUMBER |
| 02 | 22-28-1022 | A-42228-0072 | 20 | 22-28-1202 | A-42228-0090 | 02 | 22-28-1023 | A-42228-0107 | 20 | 22-28-1203 | A-42228-0125 |
| 03 | 22-28-1032 | A-42228-0073 | 21 | 22-28-1212 | A-42228-0091 | 03 | 22-28-1033 | A-42228-0108 | 21 | 22-28-1213 | A-42228-0126 |
| 04 | 22-28-1042 | A-42228-0074 | 22 | 22-28-1222 | A-42228-0092 | 04 | 22-28-1043 | A-42228-0109 | 22 | 22-28-1223 | A-42228-0127 |
| 05 | 22-28-1052 | A-42228-0075 | 23 | 22-28-1232 | A-42228-0093 | 05 | 22-28-1053 | A-42228-0110 | 23 | 22-28-2233 | A-42228-0128 |
| 06 | 22-28-1062 | A-42228-0076 | 24 | 22-28-1242 | A-42228-0094 | 06 | 22-28-1063 | A-42228-0111 | 24 | 22-28-1243 | A-42228-0129 |
| 07 | 22-28-1072 | A-42228-0077 | 25 | 22-28-1252 | A-42228-0095 | 07 | 22-28-1073 | A-42228-0112 | 25 | 22-28-1253 | A-42228-0130 |
| 08 | 22-28-1082 | A-42228-0078 | 26 | 22-28-1262 | A-42228-0096 | 08 | 22-28-1083 | A-42228-0113 | 26 | 22-28-1263 | A-42228-0131 |
| 09 | 22-28-1092 | A-42228-0079 | 27 | 22-28-1272 | A-42228-0097 | 09 | 22-28-1093 | A-42228-0114 | 27 | 22-28-1273 | A-42228-0132 |
| 10 | 22-28-1102 | A-42228-0080 | 28 | 22-28-1282 | A-42228-0098 | 10 | 22-28-1103 | A-42228-0115 | 28 | 22-28-1283 | A-42228-0133 |
| 11 | 22-28-1112 | A-42228-0081 | 29 | 22-28-1292 | A-42228-0099 | 11 | 22-28-1113 | A-42228-0116 | 29 | 22-28-1293 | A-42228-0134 |
| 12 | 22-28-1122 | A-42228-0082 | 30 | 22-28-1302 | A-42228-0100 | 12 | 22-28-1123 | A-42228-0117 | 30 | 22-28-1303 | A-42228-0135 |
| 13 | 22-28-1132 | A-42228-0083 | 31 | 22-28-1312 | A-42228-0101 | 13 | 22-28-1133 | A-42228-0118 | 31 | 22-28-1313 | A-42228-0136 |
| 14 | 22-28-1142 | A-42228-0084 | 32 | 22-28-1322 | A-42228-0102 | 14 | 22-28-1143 | A-42228-0119 | 32 | 22-28-1323 | A-42228-0137 |
| 15 | 22-28-1152 | A-42228-0085 | 33 | 22-28-1332 | A-42228-0103 | 15 | 22-28-1153 | A-42228-0120 | 33 | 22-28-1333 | A-42228-0138 |
| 16 | 22-28-1162 | A-42228-0086 | 34 | 22-28-1342 | A-42228-0104 | 16 | 22-28-1163 | A-42228-0121 | 34 | 22-28-1343 | A-42228-0139 |
| 17 | 22-28-1172 | A-42228-0087 | 35 | 22-28-1352 | A-42228-0105 | 17 | 22-28-1173 | A-42228-0122 | 35 | 22-28-1353 | A-42228-0140 |
| 18 | 22-28-1182 | A-42228-0088 | 36 | 22-28-1362 | A-42228-0106 | 18 | 22-28-1183 | A-42228-0123 | 36 | 22-28-1363 | A-42228-0141 |
| 19 | 22-28-1192 | A-42228-0089 | | | | 19 | 22-28-1193 | A-42228-0124 | | | |

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|-----------------------|--|------------------------------|--|-------------------------------|--------------|
| REV: | | TITLE: | .100 FRICTION LOCK BREAKAWAY HEADER ASSY. | | SHEET No. |
| L | | | | | - 3 - |
| DOCUMENT NUMBER: | | CREATED / REVISED BY: | CHECKED BY: | APPROVED BY: | |
| SD- 42228 -001 | | S. LINEHAN 03/04/2004 | K.SAMIEC 03/04/2004 | Y. MARGULIS 03/04/2004 | |

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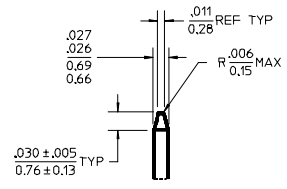
| A-42228-0142/0176 | | | | | |
|--------------------|-----------------|-----------------|------|-----------------|--------------|
| HEADER NUMBER: | | 41411 | | | |
| PIN NUMBER: | | 42663-CNB208 | | | |
| PIN LENGTH: L | | .720/18.29 | | | |
| MATING LENGTH: M | | .295/7.49 | | | |
| GOLD POINT: G | | .140/3.56 | | | |
| PC TAIL LENGTH: P | | .135/3.43 | | | |
| TIN: T | | .135/3.43 | | | |
| DIMENSION Y | | .022/0.56 | | | |
| CKTS: | | 2-36 | | | |
| KINKS: | | YES ES-42003 | | | |
| REMOVED BACKWALLS: | | NO | | | |
| VOIDED CKTS: | | NONE | | | |
| PACKAGING: | | BULK 40873-0056 | | | |
| CKTS | MATERIAL NUMBER | ENG NUMBER | CKTS | MATERIAL NUMBER | ENG NUMBER |
| 02 | 22-28-1024 | A-42228-0142 | 20 | 22-28-1204 | A-42228-0160 |
| 03 | 22-28-1034 | A-42228-0143 | 21 | 22-28-1214 | A-42228-0161 |
| 04 | 22-28-1044 | A-42228-0144 | 22 | 22-28-1224 | A-42228-0162 |
| 05 | 22-28-1054 | A-42228-0145 | 23 | 22-28-1234 | A-42228-0163 |
| 06 | 22-28-1064 | A-42228-0146 | 24 | 22-28-1244 | A-42228-0164 |
| 07 | 22-28-1074 | A-42228-0147 | 25 | 22-28-1254 | A-42228-0165 |
| 08 | 22-28-1084 | A-42228-0148 | 26 | 22-28-1264 | A-42228-0166 |
| 09 | 22-28-1094 | A-42228-0149 | 27 | 22-28-1274 | A-42228-0167 |
| 10 | 22-28-1104 | A-42228-0150 | 28 | 22-28-1284 | A-42228-0168 |
| 11 | 22-28-1114 | A-42228-0151 | 29 | 22-28-1294 | A-42228-0169 |
| 12 | 22-28-1124 | A-42228-0152 | 30 | 22-28-1304 | A-42228-0170 |
| 13 | 22-28-1134 | A-42228-0153 | 31 | 22-28-1314 | A-42228-0171 |
| 14 | 22-28-1144 | A-42228-0154 | 32 | 22-28-1324 | A-42228-0172 |
| 15 | 22-28-1154 | A-42228-0155 | 33 | 22-28-1334 | A-42228-0173 |
| 16 | 22-28-1164 | A-42228-0156 | 34 | 22-28-1344 | A-42228-0174 |
| 17 | 22-28-1174 | A-42228-0157 | 35 | 22-28-1354 | A-42228-0175 |
| 18 | 22-28-1184 | A-42228-0158 | 36 | 22-28-1364 | A-42228-0176 |
| 19 | 22-28-1194 | A-42228-0159 | | | |

| A-42228-0177/0211 | | | | | |
|--------------------|-----------------|-----------------|------|-----------------|--------------|
| HEADER NUMBER: | | 41411 | | | |
| PIN NUMBER: | | 42663-CNB228 | | | |
| PIN LENGTH: L | | .720/18.29 | | | |
| MATING LENGTH: M | | .295/7.49 | | | |
| GOLD POINT: G | | .140/3.56 | | | |
| PC TAIL LENGTH: P | | .135/3.43 | | | |
| TIN: T | | .135/3.43 | | | |
| DIMENSION Y | | .022/0.56 | | | |
| CKTS: | | 2-36 | | | |
| KINKS: | | YES ES-42003 | | | |
| REMOVED BACKWALLS: | | NO | | | |
| VOIDED CKTS: | | NONE | | | |
| PACKAGING: | | BULK 40873-0056 | | | |
| CKTS | MATERIAL NUMBER | ENG NUMBER | CKTS | MATERIAL NUMBER | ENG NUMBER |
| 02 | 22-28-1025 | A-42228-0177 | 20 | 22-28-1205 | A-42228-0195 |
| 03 | 22-28-1035 | A-42228-0178 | 21 | 22-28-1215 | A-42228-0196 |
| 04 | 22-28-1045 | A-42228-0179 | 22 | 22-28-1225 | A-42228-0197 |
| 05 | 22-28-1055 | A-42228-0180 | 23 | 22-28-2235 | A-42228-0198 |
| 06 | 22-28-1065 | A-42228-0181 | 24 | 22-28-1245 | A-42228-0199 |
| 07 | 22-28-1075 | A-42228-0182 | 25 | 22-28-1255 | A-42228-0200 |
| 08 | 22-28-1085 | A-42228-0183 | 26 | 22-28-1265 | A-42228-0201 |
| 09 | 22-28-1095 | A-42228-0184 | 27 | 22-28-1275 | A-42228-0202 |
| 10 | 22-28-1105 | A-42228-0185 | 28 | 22-28-1285 | A-42228-0203 |
| 11 | 22-28-1115 | A-42228-0186 | 29 | 22-28-1295 | A-42228-0204 |
| 12 | 22-28-1125 | A-42228-0187 | 30 | 22-28-1305 | A-42228-0205 |
| 13 | 22-28-1135 | A-42228-0188 | 31 | 22-28-1315 | A-42228-0206 |
| 14 | 22-28-1145 | A-42228-0189 | 32 | 22-28-1325 | A-42228-0207 |
| 15 | 22-28-1155 | A-42228-0190 | 33 | 22-28-1335 | A-42228-0208 |
| 16 | 22-28-1165 | A-42228-0191 | 34 | 22-28-1345 | A-42228-0209 |
| 17 | 22-28-1175 | A-42228-0192 | 35 | 22-28-1355 | A-42228-0210 |
| 18 | 22-28-1185 | A-42228-0193 | 36 | 22-28-1365 | A-42228-0211 |
| 19 | 22-28-1195 | A-42228-0194 | | | |

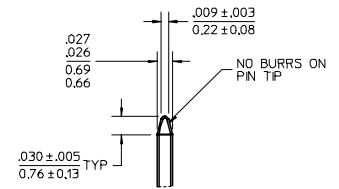
| | | | | | |
|------|--|--------|--|-----------|-------|
| REV: | | TITLE: | .100 FRICTION LOCK BREAKAWAY HEADER ASSY. | SHEET No. | - 4 - |
|------|--|--------|--|-----------|-------|

| | | | |
|---|---|---|---|
| DOCUMENT NUMBER: SD- 42228 -001 | CREATED / REVISED BY: S. LINEHAN 03/04/2004 | CHECKED BY: K.SAMIEC 03/04/2004 | APPROVED BY: Y. MARGULIS 03/04/2004 |
|---|---|---|---|

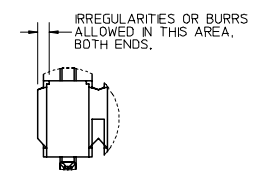
| CKTS | DM A | DM B |
|------|-------------|-------------|
| 2 | .200/5.08 | .100/2.54 |
| 3 | .300/7.62 | .200/5.08 |
| 4 | .400/10.16 | .300/7.62 |
| 5 | .500/12.70 | .400/10.16 |
| 6 | .600/15.24 | .500/12.70 |
| 7 | .700/17.78 | .600/15.24 |
| 8 | .800/20.32 | .700/17.78 |
| 9 | .900/22.86 | .800/20.32 |
| 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 |



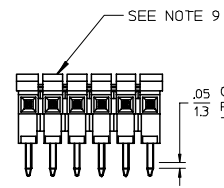
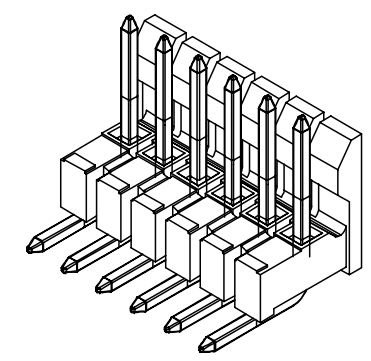
DETAIL X
SCALE 5:1



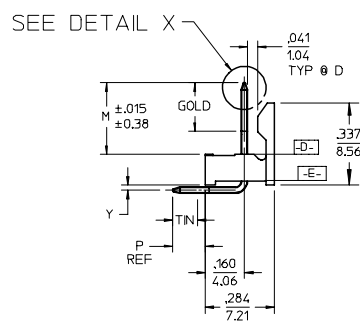
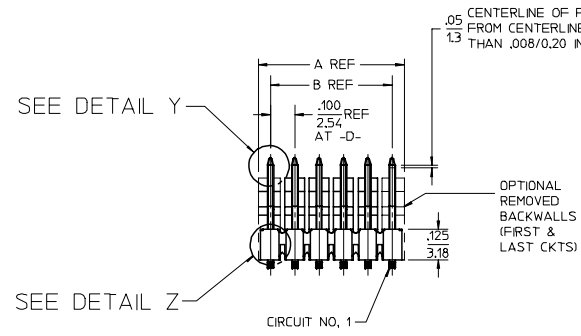
DETAIL Y
SCALE 5:1



DETAIL Z
SCALE 5:1

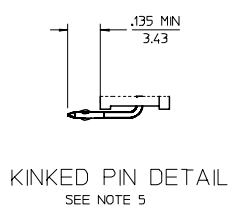
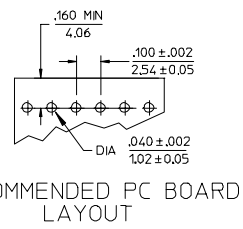


.05 CENTERLINE OF PIN IN AREA SHOWN NOT TO VARY FROM CENTERLINE OF PIN AT DATUM -D- BY MORE THAN .008/0.20 IN ANY DIRECTION.



- NOTES:
 1. MATERIAL: GLASS FILLED NYLON, 94V-0, COLOR: BLACK
 2. 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 MN, *SELECT TIN: .000100/0.00254 MN, OVERALL NICKEL UNDERPLATE: .000050/0.00127 MN.
 *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
 3. PRODUCT SPECIFICATION: PS-10-07.
 4. PACKAGING INFORMATION: SEE TABLES
 5. KINK PIN SPECIFICATION: SEE SMES-42003
 6. HEADERS ARE NOT STACKABLE ON .100/2.54 CENTERS.
 7. SOLDERABILITY PER SMES-152.
 8. PIN PUSH OUT FORCE: 3 LBS. MIN.
 9. ABRASION MARKS ON BACK WALL SURFACE ARE PERMISSIBLE.

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



ADD NOTE 9
 EC NO: UCP2006-1710
 DRW: ADERR 2006/02/01
 CHK: DLSCHMIDT 2006/02/02
 APPR: FSWITH 2006/02/06

| REV | DESCRIPTION |
|-----|-------------|
| L4 | |

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

| GENERAL TOLERANCES (UNLESS SPECIFIED) | |
|---------------------------------------|--------|
| | INCH |
| 4 PLACES | ± .010 |
| 3 PLACES | ± .015 |
| 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 | DESIGN UNITS | THIRD ANGLE PROJECTION |
|---|--------------|------------------------|
| 2:1 | INCH | ☉ |
| TITLE .100 FRICTION LOCK BREAKAWAY HEADER ASSY | | |
| MATERIAL NO. MOLEX INCORPORATED | | |
| DOCUMENT NO. SD-42228-002 | | SHEET NO. 1 OF 6 |

| A-42228-0077 | | | | | | A-42228-0144 | | | | | |
|--------------------|-----------------|-----------------|------|-----------------|------------|--------------------|-----------------|-----------------|------|-----------------|------------|
| HEADER NUMBER: | | 41411 | | | | HEADER NUMBER: | | 41411 | | | |
| PIN NUMBER: | | 42663-CKB228 | | | | PIN NUMBER: | | 42663-CNB208 | | | |
| PIN LENGTH: L | | .705/17.91 | | | | PIN LENGTH: L | | .720/18.29 | | | |
| MATING LENGTH: M | | .295/7.49 | | | | MATING LENGTH: M | | .295/7.49 | | | |
| GOLD POINT: G | | .140/3.56 | | | | GOLD POINT: G | | .140/3.56 | | | |
| PC TAIL LENGTH: P | | .120/3.05 | | | | PC TAIL LENGTH: P | | .135/3.43 | | | |
| TIN: T | | .135/3.43 | | | | TIN: T | | .135/3.43 | | | |
| DIMENSION Y | | .022/0.56 | | | | DIMENSION Y | | .022/0.56 | | | |
| CKTS: | | 2-36 | | | | CKTS: | | 2-36 | | | |
| KINKS: | | NO | | | | KINKS: | | YES ES-42003 | | | |
| REMOVED BACKWALLS: | | NO | | | | REMOVED BACKWALLS: | | NO | | | |
| VOIDED CKTS: | | NONE | | | | VOIDED CKTS: | | NONE | | | |
| PACKAGING: | | BULK 40873-0056 | | | | PACKAGING: | | BULK 40873-0056 | | | |
| CKTS | MATERIAL NUMBER | ENG NUMBER | CKTS | MATERIAL NUMBER | ENG NUMBER | CKTS | MATERIAL NUMBER | ENG NUMBER | CKTS | MATERIAL NUMBER | ENG NUMBER |
| 02 | | | 20 | | | 02 | | | 20 | | |
| 03 | | | 21 | | | 03 | | | 21 | | |
| 04 | | | 22 | | | 04 | 50-29-1739 | A-42228-0144 | 22 | | |
| 05 | | | 23 | | | 05 | | | 23 | | |
| 06 | | | 24 | | | 06 | | | 24 | | |
| 07 | 50-29-1881 | A-42228-0077 | 25 | | | 07 | | | 25 | | |
| 08 | | | 26 | | | 08 | | | 26 | | |
| 09 | | | 27 | | | 09 | | | 27 | | |
| 10 | | | 28 | | | 10 | | | 28 | | |
| 11 | | | 29 | | | 11 | | | 29 | | |
| 12 | | | 30 | | | 12 | | | 30 | | |
| 13 | | | 31 | | | 13 | | | 31 | | |
| 14 | | | 32 | | | 14 | | | 32 | | |
| 15 | | | 33 | | | 15 | | | 33 | | |
| 16 | | | 34 | | | 16 | | | 34 | | |
| 17 | | | 35 | | | 17 | | | 35 | | |
| 18 | | | 36 | | | 18 | | | 36 | | |
| 19 | | | | | | 19 | | | | | |

| | | | |
|---|--|--|--|
| REV: A2 | TITLE: .100 FRICTION LOCK BREAKAWAY HEADER ASSY. LEAD-FREE | SHEET No. - 2 - | |
| DOCUMENT NUMBER: SD- 42228 -003 | CREATED / REVISED BY: DPETERSON 09/26/2005 | CHECKED BY: ADERR 09/26/2005 | APPROVED BY: FSMITH 09/26/2005 |