

PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION

**Part Number:** [0022280063](#)  
**Status:** **Active**  
**Description:** 2.54mm (.100") Pitch KK® Header, Breakaway, Vertical, with Friction Lock, 6 Circuits, Tin (Sn) Plating. with Kinked PC Tails

**Documents:**  
[3D Model](#)  
[Drawing \(PDF\)](#)  
[Packaging Specification \(PDF\)](#)  
[Product Specification PS-10-07 \(PDF\)](#)  
[RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
UL E29179

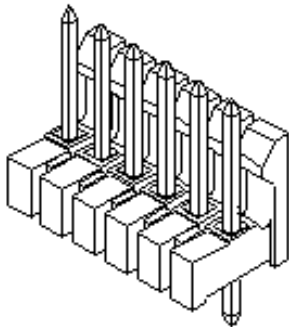
**General**

Product Family PCB Headers  
Series [42227](#)  
Application Wire-to-Board  
Product Name KK®

**Physical**

Breakaway Yes  
Circuits (Loaded) 6  
Circuits (maximum) 6  
Color - Resin Black  
Durability (mating cycles max) 25  
Flammability 94V-0  
Glow-Wire Compliant No  
Lock to Mating Part Yes  
Material - Metal Brass  
Material - Plating Mating Tin  
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 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) 100  
Plating min: Mating (µm) 2.5  
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**



Series  
image - Reference only

**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](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.

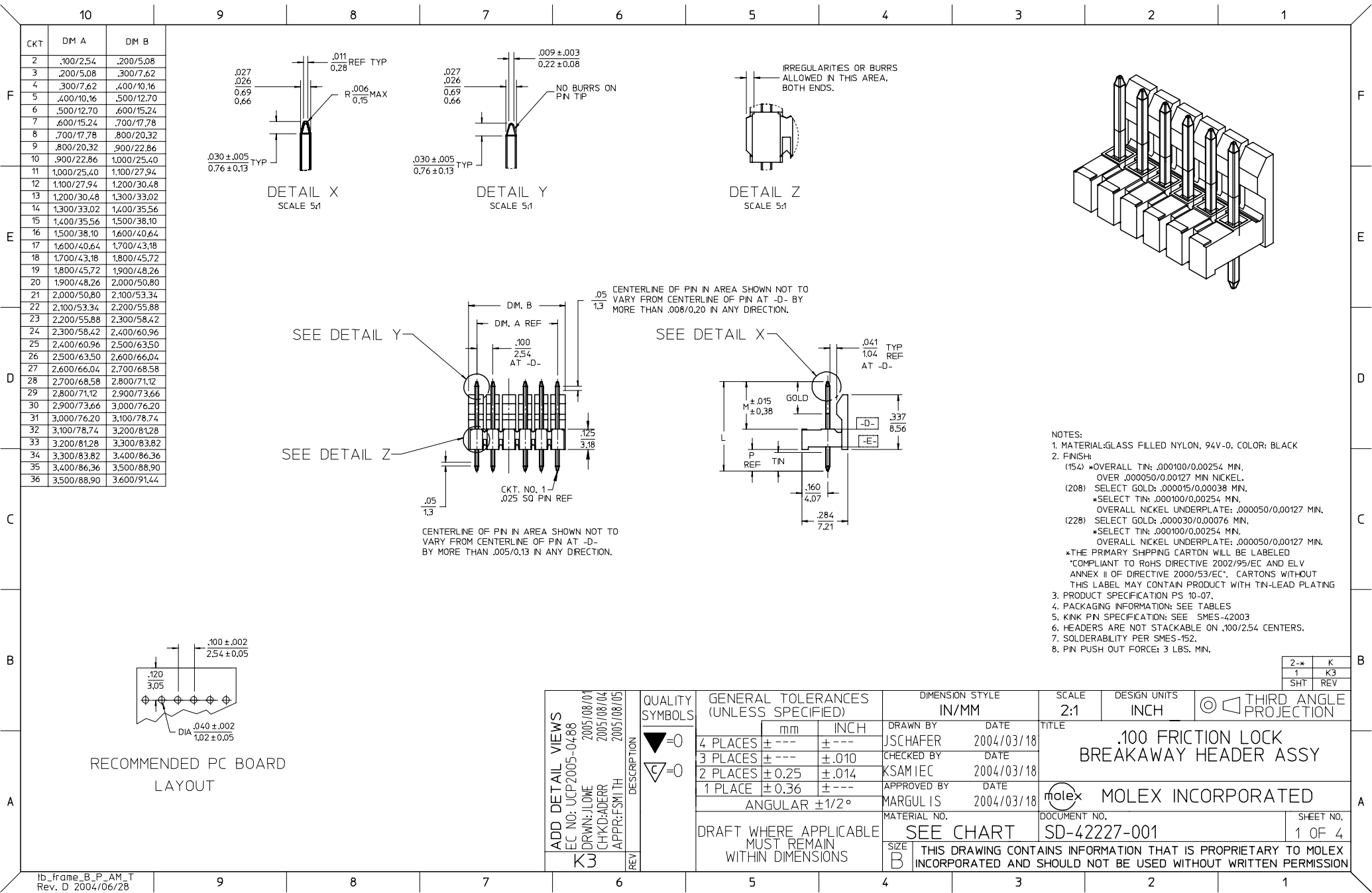
**Search Parts in this Series**  
[42227Series](#)

**Mates With**  
[2695](#) , [6471](#) , [7880](#) , [4455](#) , [7720](#)

|                                                |                        |
|------------------------------------------------|------------------------|
| Current - Maximum per Contact                  | 4A                     |
| Voltage - Maximum                              | 250V                   |
| <b>Solder Process Data</b>                     |                        |
| 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                    |
| <b>Material Info</b>                           |                        |
| Old Part Number                                | 42227-0111             |
| <b>Reference - Drawing Numbers</b>             |                        |
| Product Specification                          | PS-10-07               |
| Sales Drawing                                  | SD-42227-001           |

This document was generated on 03/21/2010

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- NOTES:
1. MATERIAL: GLASS FILLED NYLON, 94V-0, COLOR: BLACK
  2. 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
  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/.254 CENTERS.
  7. SOLDERABILITY PER SMES-152.
  8. PIN PUSH OUT FORCE: 3 LBS. MIN.

|     |     |
|-----|-----|
| 2-* | K   |
| 1   | K3  |
| SHT | REV |

|                                                                                                                        |  |             |                                   |                                                            |        |                          |                                                                                                                                  |                    |                                                          |                                                                                                                 |  |
|------------------------------------------------------------------------------------------------------------------------|--|-------------|-----------------------------------|------------------------------------------------------------|--------|--------------------------|----------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------|--|
| ADD DETAIL VIEWS<br>EC NO: UCP2005-0488<br>DRWN: JLOWE 2005/08/01<br>CHKD: ADERR 2005/08/04<br>APPR: FSWITH 2005/08/05 |  | DESCRIPTION | QUALITY SYMBOLS<br><br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |        | DIMENSION STYLE<br>IN/MM |                                                                                                                                  | SCALE<br>2:1       | DESIGN UNITS<br>INCH                                     | THIRD ANGLE PROJECTION<br> |  |
|                                                                                                                        |  |             |                                   |                                                            | mm     | INCH                     | DRAWN BY<br>JSCHAFER                                                                                                             | DATE<br>2004/03/18 | TITLE<br><br>.100 FRICTION LOCK<br>BREAKAWAY HEADER ASSY |                                                                                                                 |  |
| K3                                                                                                                     |  | REV         |                                   | 4 PLACES                                                   | ± ---  | ± ---                    | CHECKED BY                                                                                                                       | DATE               |                                                          |                                                                                                                 |  |
|                                                                                                                        |  |             |                                   | 3 PLACES                                                   | ± ---  | ± .010                   | KSAMIEC                                                                                                                          | 2004/03/18         |                                                          |                                                                                                                 |  |
|                                                                                                                        |  |             |                                   | 2 PLACES                                                   | ± 0.25 | ± .014                   | APPROVED BY                                                                                                                      | DATE               |                                                          |                                                                                                                 |  |
|                                                                                                                        |  |             |                                   | 1 PLACE                                                    | ± 0.36 | ± ---                    | MARGULIS                                                                                                                         | 2004/03/18         |                                                          |                                                                                                                 |  |
|                                                                                                                        |  |             |                                   | ANGULAR ±1/2°                                              |        | MATERIAL NO.             |                                                                                                                                  |                    |                                                          |                                                                                                                 |  |
|                                                                                                                        |  |             |                                   | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |        | SEE CHART                |                                                                                                                                  |                    |                                                          |                                                                                                                 |  |
|                                                                                                                        |  |             |                                   |                                                            |        | SIZE<br>B                | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                    |                                                          |                                                                                                                 |  |

|                                                  |                 |                 |      |                 |                                              |  |  |                     |  |                        |  |
|--------------------------------------------------|-----------------|-----------------|------|-----------------|----------------------------------------------|--|--|---------------------|--|------------------------|--|
|                                                  |                 |                 |      |                 |                                              |  |  |                     |  |                        |  |
|                                                  |                 |                 |      |                 |                                              |  |  |                     |  |                        |  |
| 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    |      |                 |                                              |  |  |                     |  |                        |  |
|                                                  |                 |                 |      |                 |                                              |  |  |                     |  |                        |  |
| REV:                                             |                 |                 |      |                 | TITLE:                                       |  |  |                     |  | SHEET No.              |  |
| K                                                |                 | SEE SHEET 1     |      |                 | .100 FRICTION LOCK<br>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 |  |
| TEMPLATE FILENAME: PRODUCT_SPEC[SIZE_A](V.1).DOC |                 |                 |      |                 |                                              |  |  |                     |  |                        |  |

| 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    |      |                 |              |

|                                                  |                 |                 |      |                                                       |              |  |  |                                              |  |  |  |                                               |  |  |  |
|--------------------------------------------------|-----------------|-----------------|------|-------------------------------------------------------|--------------|--|--|----------------------------------------------|--|--|--|-----------------------------------------------|--|--|--|
|                                                  |                 |                 |      |                                                       |              |  |  |                                              |  |  |  |                                               |  |  |  |
|                                                  |                 |                 |      |                                                       |              |  |  |                                              |  |  |  |                                               |  |  |  |
| 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    |      |                                                       |              |  |  |                                              |  |  |  |                                               |  |  |  |
|                                                  |                 |                 |      |                                                       |              |  |  |                                              |  |  |  |                                               |  |  |  |
| REV:                                             |                 | SEE SHEET 1     |      | TITLE:                                                |              |  |  | .100 FRICTION LOCK<br>BREAKAWAY HEADER ASSY. |  |  |  | SHEET No.<br><b>- 3 -</b>                     |  |  |  |
| DOCUMENT NUMBER:<br><b>SD- 42227 -001</b>        |                 |                 |      | CREATED / REVISED BY:<br><b>S. LINEHAN 03/04/2004</b> |              |  |  | CHECKED BY:<br><b>K.SAMIEC 03/04/2004</b>    |  |  |  | APPROVED BY:<br><b>Y. MARGULIS 03/04/2004</b> |  |  |  |
| TEMPLATE FILENAME: PRODUCT_SPEC[SIZE_A](V.1).DOC |                 |                 |      |                                                       |              |  |  |                                              |  |  |  |                                               |  |  |  |

| 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    |      |                 |              |

|                    |                 |                 |      |                 |              |  |  |  |  |  |  |
|--------------------|-----------------|-----------------|------|-----------------|--------------|--|--|--|--|--|--|
|                    |                 |                 |      |                 |              |  |  |  |  |  |  |
|                    |                 |                 |      |                 |              |  |  |  |  |  |  |
| 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<br>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 |           |

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