

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0022235034](#)
Status: **Active**
Description: 2.54mm (.100") Pitch KK® Solid Header, Vertical, 3 Circuits, without Kinked PC Tails

Documents:

[3D Model](#) [RoHS Certificate of Compliance \(PDF\)](#)
[Drawing \(PDF\)](#)

Agency Certification

CSA LR19980
 UL E29179

General

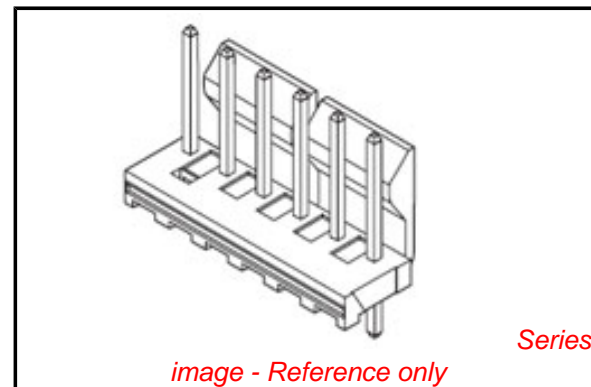
Product Family PCB Headers
 Series [43009](#)
 Application Wire-to-Board
 Product Name KK®

Physical

Breakaway No
 Circuits (Loaded) 3
 Circuits (maximum) 3
 Color - Resin Natural
 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 Polyester
 Number of Rows 1
 Orientation Vertical
 PC Tail Length (in) 0.140 In
 PC Tail Length (mm) 3.56 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) 200
 Plating min: Mating (µm) 5
 Plating min: Termination (µin) 200
 Plating min: Termination (µm) 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

Current - Maximum per Contact 4A
 Voltage - Maximum 250V



EU RoHS

ELV and RoHS Compliant
REACH SVHC Contains SVHC: No
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

[43009Series](#)

Mates With

[2695](#) , [6471](#) , [7880](#) , [4455](#) , [7720](#) , [40555](#)

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

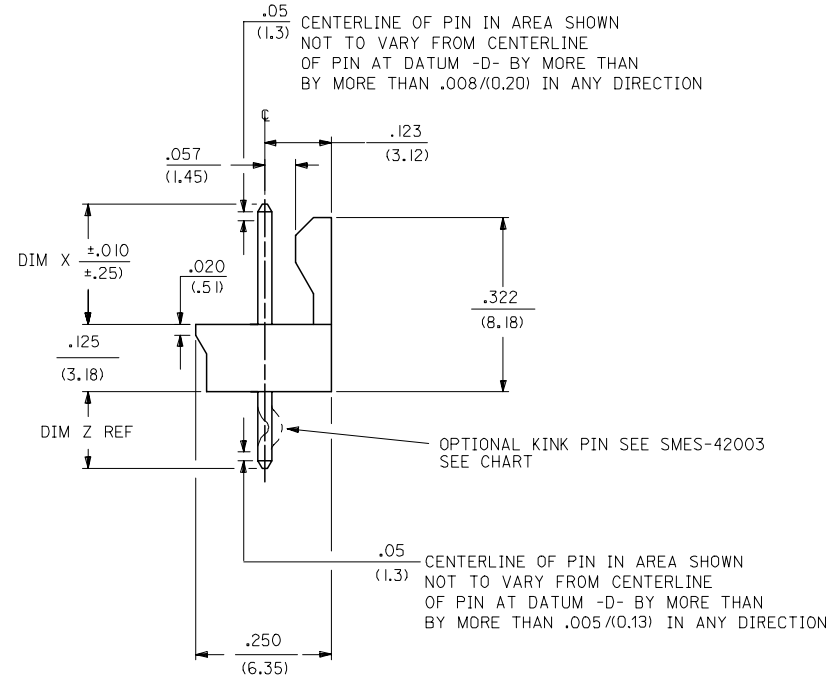
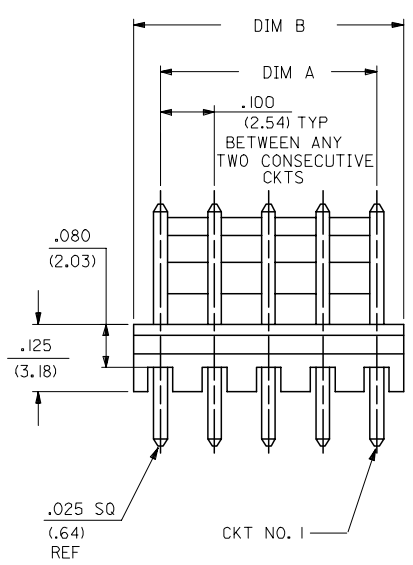
| | |
|-----------------|--------------|
| Old Part Number | A-43009-0003 |
|-----------------|--------------|

Reference - Drawing Numbers

| | |
|---------------|-----------|
| Sales Drawing | SDA-43009 |
|---------------|-----------|

This document was generated on 03/19/2010

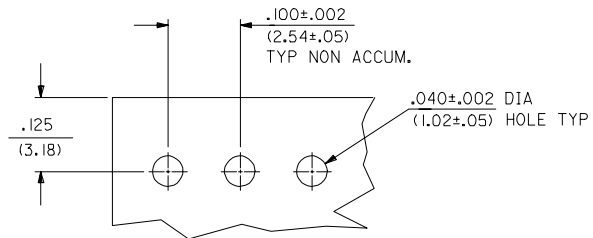
PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION



| CKTS | DIM A | DIM B |
|------|-----------------|-----------------|
| 2 | .100 (2.54) | .195 (4.95) |
| 3 | .200 (5.08) | .295 (7.49) |
| 4 | .300 (7.62) | .395 (10.03) |
| 5 | .400 (10.16) | .495 (12.57) |
| 6 | .500 (12.70) | .595 (15.11) |
| 7 | .600 (15.24) | .695 (17.65) |
| 8 | .700 (17.78) | .795 (20.19) |
| 9 | .800 (20.32) | .895 (22.73) |
| 10 | .900 (22.86) | .995 (25.27) |

NOTES:

- MATERIAL: 7 1/2% GLASS FILLED POLYESTER, 94V-0.
HOUSING COLORS: 42009 - N = NATURAL COLOR - ND = YELLOW
- NA = BLUE - NE = GREEN
- NB = BROWN - NR = RED
- NC = ORANGE - NG = GREY
PIN MATERIAL: 260 BRASS.
- FINISH:
(102) - OVERALL TIN: .000200/(0.00508) MIN., OVERALL COPPER UNDERPLATE: .000100/(0.00254) MIN.
(154) - OVERALL TIN: .000100/(0.00254) MIN., OVERALL NICKEL UNDERPLATE: .000050/(0.00127) MIN.
(501) - OVERALL GOLD: .000020/(0.00051) MIN., OVERALL NICKEL UNDERPLATE: .000030/(0.00076) MIN.
(509) - OVERALL GOLD: .000050/(0.00127) MIN., OVERALL NICKEL UNDERPLATE: .000030/(0.00076) MIN.
- PRODUCT SPECIFICATIONS: PS-10-07.
- PACKAGING: OPTION 1: BULK PER PK-43009-001.
OPTION 2: TUBE PER PK-44743-001.
- PIN PUSH OUT FORCE: 3 LBS. MIN. (PER CKT).
- PARTS ARE STACKABLE END TO END ON .100/(2.54) CENTERS.
- SOLDERABILITY PER ES-152.



RECOMMENDED PC BOARD LAYOUT
(.062 THK)

| | | |
|-----------|-------|------|
| GEN. DOC. | 2-* | C1 |
| ME 10 | 1 | C1 |
| DOC. TYPE | SHEET | REV. |

| | | |
|--------------|---------------------|------------|
| ADD TUBE PKG | FC NO: UCP2006-1787 | 2006/02/13 |
| DRW:NAELHAG | CHKD:LSHMDT | 2006/02/16 |
| APPR:FSMTH | REV | 2006/02/17 |

| | |
|-----------------|-------------|
| QUALITY SYMBOLS | DESCRIPTION |
| ◻=0 | |
| ◻=0 | |

| GENERAL TOLERANCES (UNLESS SPECIFIED) | |
|--|--------|
| | IN/MM |
| 4 PLACES ± --- | ± --- |
| 3 PLACES ± --- | ± .010 |
| 2 PLACES ± 0.25 | ± .014 |
| 1 PLACE ± 0.36 | ± --- |
| ANGULAR ±1/2° | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | |

| | | |
|--------------|----------|-------|
| DRAWN BY | DATE | TITLE |
| SAMIEC | 01/28/92 | |
| CHECKED BY | DATE | |
| PATEL | 01/28/92 | |
| APPROVED BY | DATE | |
| LENZ | 01/28/92 | |
| MATERIAL NO. | | |
| | METRIC | |

| | | |
|---|---------------------|------------------------|
| SCALE --- | DESIGN UNITS METRIC | THIRD ANGLE PROJECTION |
| HEADER ASSEMBLY FRICTION LOCK .100 CENTERS | | |
| MOLEX INCORPORATED | | |
| DOCUMENT NO. SDA-43009 | SHEET NO. 1 OF 5 | |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | |

| A-43009-0002/0010 | | | A-43009-001/0019 | | | A-43009-0020/0028 | | | A-43009-0029/0037 | | |
|-------------------|-------------|-----------------|------------------|-------------|-----------------|-------------------|-------------|-----------------|-------------------|-------------|-----------------|
| OPTIONS | Header No. | 42009-N | OPTIONS | Header No. | 42009-N | OPTIONS | Header No. | 42009-NE | OPTIONS | Header No. | 42009-NR |
| | Pin No. | 2766-1(102) | | Pin No. | 2766-1(102) | | Pin No. | 2766-1(102) | | Pin No. | 2766-1(102) |
| | Dim. L | .560/(14.22) | | Dim. L | .560/(14.22) | | Dim. L | .560/(14.22) | | Dim. L | .560/(14.22) |
| | Dim. X | .295/(7.49) | | Dim. X | .295/(7.49) | | Dim. X | .295/(7.49) | | Dim. X | .295/(7.49) |
| | Dim. Z | .140/(3.56) | | Dim. Z | .140/(3.56) | | Dim. Z | .140/(3.56) | | Dim. Z | .140/(3.56) |
| | No. of Ckts | 2-10 | | No. of Ckts | 2-10 | | No. of Ckts | 2-10 | | No. of Ckts | 2-10 |
| | Void Ckts | None | | Void Ckts | None | | Void Ckts | None | | Void Ckts | None |
| | Kink Pins | No | | Kink Pins | Yes | | Kink Pins | Yes | | Kink Pins | Yes |
| | Color | - | | Color | - | | Color | Green | | Color | Red |
| | Packaging | PK-43009-001 | | Packaging | PK-43009-001 | | Packaging | PK-43009-001 | | Packaging | PK-43009-001 |
| Ckt | EDP No. | Engineering No. | Ckt | EDP No. | Engineering No. | Ckt | EDP No. | Engineering No. | Ckt | EDP No. | Engineering No. |
| 2 | 22-23-5024 | A-43009-0002 | 2 | 22-23-5021 | A-43009-0011 | 2 | 22-23-5022 | A-43009-0020 | 2 | 22-23-5023 | A-43009-0029 |
| 3 | 22-23-5034 | A-43009-0003 | 3 | 22-23-5031 | A-43009-0012 | 3 | 22-23-5032 | A-43009-0021 | 3 | 22-23-5033 | A-43009-0030 |
| 4 | 22-23-5044 | A-43009-0004 | 4 | 22-23-5041 | A-43009-0013 | 4 | 22-23-5042 | A-43009-0022 | 4 | 22-23-5043 | A-43009-0031 |
| 5 | 22-23-5054 | A-43009-0005 | 5 | 22-23-5051 | A-43009-0014 | 5 | 22-23-5052 | A-43009-0023 | 5 | 22-23-5053 | A-43009-0032 |
| 6 | 22-23-5064 | A-43009-0006 | 6 | 22-23-5061 | A-43009-0015 | 6 | 22-23-5062 | A-43009-0024 | 6 | 22-23-5063 | A-43009-0033 |
| 7 | 22-23-5074 | A-43009-0007 | 7 | 22-23-5071 | A-43009-0016 | 7 | 22-23-5072 | A-43009-0025 | 7 | 22-23-5073 | A-43009-0034 |
| 8 | 22-23-5084 | A-43009-0008 | 8 | 22-23-5081 | A-43009-0017 | 8 | 22-23-5082 | A-43009-0026 | 8 | 22-23-5083 | A-43009-0035 |
| 9 | 22-23-5094 | A-43009-0009 | 9 | 22-23-5091 | A-43009-0018 | 9 | 22-23-5092 | A-43009-0027 | 9 | 22-23-5093 | A-43009-0036 |
| 10 | 22-23-5104 | A-43009-0010 | 10 | 22-23-5101 | A-43009-0019 | 10 | 22-23-5102 | A-43009-0028 | 10 | 22-23-5103 | A-43009-0037 |
| 11 | | | 11 | | | 11 | | | 11 | | |
| 12 | | | 12 | | | 12 | | | 12 | | |
| 13 | | | 13 | | | 13 | | | 13 | | |
| 14 | | | 14 | | | 14 | | | 14 | | |
| 15 | | | 15 | | | 15 | | | 15 | | |
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| REV: C1 | SEE SHEET 1 2/17/2006 | TITLE: HEADER ASSEMBLY FRICTION LOCK .100 CENTERS | SHEET No. - 2 - |
| DOCUMENT NUMBER: SDA-43009 | | CREATED / REVISED BY: DRATNOL | CHECKED BY: SAMIEC |
| | | APPROVED BY: MARGULIS | |

| A-43009-0038/0046 | | | A-43009-047/0055 | | | A-43009-0056/0064 | | | A-43009-0066/0073 | | |
|-------------------|----------------|------------------------|------------------|----------------|------------------------|-------------------|----------------|------------------------|-------------------|----------------|------------------------|
| OPTIONS | Header No. | 42009-ND | OPTIONS | Header No. | 42009-N | OPTIONS | Header No. | 42009-N | OPTIONS | Header No. | 42009-N |
| | Pin No. | 2766-1(102) | | Pin No. | 2766-1(501) | | Pin No. | 2766-1(509) | | Pin No. | 2766-1(102) |
| | Dim. L | .560/(14.22) | | Dim. L | .560/(14.22) | | Dim. L | .560/(14.22) | | Dim. L | .560/(14.22) |
| | Dim. X | .295/(7.49) | | Dim. X | .295/(7.49) | | Dim. X | .295/(7.49) | | Dim. X | .295/(7.49) |
| | Dim. Z | .140/(3.56) | | Dim. Z | .140/(3.56) | | Dim. Z | .140/(3.56) | | Dim. Z | .140/(3.56) |
| | No. of Ckts | 2-10 | | No. of Ckts | 2-10 | | No. of Ckts | 2-10 | | No. of Ckts | 3-10 |
| | Void Ckts | None | | Void Ckts | None | | Void Ckts | None | | Void Ckts | 1 |
| | Kink Pins | Yes | | Kink Pins | Yes | | Kink Pins | Yes | | Kink Pins | Yes |
| | Color | Yellow | | Color | - | | Color | - | | Color | - |
| | Packaging | PK-43009-001 | | Packaging | PK-43009-001 | | Packaging | PK-43009-001 | | Packaging | PK-43009-001 |
| Ckt | EDP No. | Engineering No. | Ckt | EDP No. | Engineering No. | Ckt | EDP No. | Engineering No. | Ckt | EDP No. | Engineering No. |
| 2 | 22-23-5025 | A-43009-0038 | 2 | | A-43009-0047 | 2 | 43009-0056 | A-43009-0056 | 2 | | |
| 3 | 22-23-5035 | A-43009-0039 | 3 | | A-43009-0048 | 3 | 43009-0057 | A-43009-0057 | 3 | 43009-0066 | A-43009-0066 |
| 4 | 22-23-5045 | A-43009-0040 | 4 | | A-43009-0049 | 4 | 43009-0058 | A-43009-0058 | 4 | 43009-0067 | A-43009-0067 |
| 5 | 22-23-5055 | A-43009-0041 | 5 | | A-43009-0050 | 5 | 43009-0059 | A-43009-0059 | 5 | 43009-0068 | A-43009-0068 |
| 6 | 22-23-5065 | A-43009-0042 | 6 | | A-43009-0051 | 6 | 43009-0060 | A-43009-0060 | 6 | 43009-0069 | A-43009-0069 |
| 7 | 22-23-5075 | A-43009-0043 | 7 | | A-43009-0052 | 7 | 43009-0061 | A-43009-0061 | 7 | 43009-0070 | A-43009-0070 |
| 8 | 22-23-5085 | A-43009-0044 | 8 | | A-43009-0053 | 8 | 43009-0062 | A-43009-0062 | 8 | 43009-0071 | A-43009-0071 |
| 9 | 22-23-5095 | A-43009-0045 | 9 | | A-43009-0054 | 9 | 43009-0063 | A-43009-0063 | 9 | 43009-0072 | A-43009-0072 |
| 10 | 22-23-5105 | A-43009-0046 | 10 | | A-43009-0055 | 10 | 43009-0064 | A-43009-0064 | 10 | 43009-0073 | A-43009-0073 |
| 11 | | | 11 | | | 11 | | | 11 | | |
| 12 | | | 12 | | | 12 | | | 12 | | |
| 13 | | | 13 | | | 13 | | | 13 | | |
| 14 | | | 14 | | | 14 | | | 14 | | |
| 15 | | | 15 | | | 15 | | | 15 | | |

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|--------------------------------------|--------------------------|---|------------------------------|
| REV: C1 | SEE SHEET 1 2/17/2006 | TITLE: HEADER ASSEMBLY FRICTION LOCK .100 CENTERS | SHEET No. - 3 - |
| DOCUMENT NUMBER: SDA-43009 | | CREATED / REVISED BY: DRATNOL | CHECKED BY: SAMIEC |
| | | APPROVED BY: MARGULIS | |

| A-43009-0074/0081 | | | A-43009-082/0089 | | | A-43009-0090/0097 | | | A-43009-0098/0106 | | |
|-------------------|-------------|-----------------|------------------|-------------|-----------------|-------------------|-------------|-----------------|-------------------|-------------|-----------------|
| OPTIONS | Header No. | 42009-N | OPTIONS | Header No. | 42009-N | OPTIONS | Header No. | 42009-N | OPTIONS | Header No. | 42009-N |
| | Pin No. | 2766-1(102) | | Pin No. | 2766-1(102) | | Pin No. | 2766-1(102) | | Pin No. | 2766-1(154) |
| | Dim. L | .560/(14.22) | | Dim. L | .560/(14.22) | | Dim. L | .560/(14.22) | | Dim. L | .560/(14.22) |
| | Dim. X | .295/(7.49) | | Dim. X | .295/(7.49) | | Dim. X | .295/(7.49) | | Dim. X | .295/(7.49) |
| | Dim. Z | .140/(3.56) | | Dim. Z | .140/(3.56) | | Dim. Z | .140/(3.56) | | Dim. Z | .140/(3.56) |
| | No. of Ckts | 3-10 | | No. of Ckts | 3-10 | | No. of Ckts | 3-10 | | No. of Ckts | 2-10 |
| | Void Ckts | 2 | | Void Ckts | 3 | | Void Ckts | 3 | | Void Ckts | NONE |
| | Kink Pins | Yes | | Kink Pins | Yes | | Kink Pins | No | | Kink Pins | NO |
| | Color | - | | Color | - | | Color | - | | Color | - |
| | Packaging | PK-43009-001 | | Packaging | PK-43009-001 | | Packaging | PK-43009-001 | | Packaging | PK-43009-001 |
| Ckt | EDP No. | Engineering No. | Ckt | EDP No. | Engineering No. | Ckt | EDP No. | Engineering No. | Ckt | EDP No. | Engineering No. |
| 2 | | | 2 | | | 2 | | | 2 | 50-34-1986 | A-43009-0098 |
| 3 | 43009-0074 | A-43009-0074 | 3 | 43009-0082 | A-43009-0082 | 3 | 43009-0090 | A-43009-0090 | 3 | 50-34-1987 | A-43009-0099 |
| 4 | 43009-0075 | A-43009-0075 | 4 | 43009-0083 | A-43009-0083 | 4 | 43009-0091 | A-43009-0091 | 4 | 50-34-1988 | A-43009-0100 |
| 5 | 43009-0076 | A-43009-0076 | 5 | 43009-0084 | A-43009-0084 | 5 | 43009-0092 | A-43009-0092 | 5 | 50-34-1989 | A-43009-0101 |
| 6 | 43009-0077 | A-43009-0077 | 6 | 43009-0085 | A-43009-0085 | 6 | 43009-0093 | A-43009-0093 | 6 | 50-34-1990 | A-43009-0102 |
| 7 | 43009-0078 | A-43009-0078 | 7 | 43009-0086 | A-43009-0086 | 7 | 43009-0094 | A-43009-0094 | 7 | 50-34-1991 | A-43009-0103 |
| 8 | 43009-0079 | A-43009-0079 | 8 | 43009-0087 | A-43009-0087 | 8 | 43009-0095 | A-43009-0095 | 8 | 50-34-1992 | A-43009-0104 |
| 9 | 43009-0080 | A-43009-0080 | 9 | 43009-0088 | A-43009-0088 | 9 | 43009-0096 | A-43009-0096 | 9 | 50-34-1993 | A-43009-0105 |
| 10 | 43009-0081 | A-43009-0081 | 10 | 43009-0089 | A-43009-0089 | 10 | 43009-0097 | A-43009-0097 | 10 | 50-34-1994 | A-43009-0106 |
| 11 | | | 11 | | | 11 | | | 11 | | |
| 12 | | | 12 | | | 12 | | | 12 | | |
| 13 | | | 13 | | | 13 | | | 13 | | |
| 14 | | | 14 | | | 14 | | | 14 | | |
| 15 | | | 15 | | | 15 | | | 15 | | |

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| REV: C1 | SEE SHEET 1 2/17/2006 | TITLE: HEADER ASSEMBLY FRICTION LOCK .100 CENTERS | SHEET No. - 4 - |
| DOCUMENT NUMBER: SDA-43009 | | CREATED / REVISED BY: DRATNOL | CHECKED BY: SAMIEC |
| | | APPROVED BY: MARGULIS | |

| A-43009-0107/0115 | | | | | | | | | | | |
|-------------------|-------------|-----------------|---------|-------------|-----------------|---------|-------------|-----------------|---------|-------------|-----------------|
| OPTIONS | Header No. | 42009-N | OPTIONS | Header No. | | OPTIONS | Header No. | | OPTIONS | Header No. | |
| | Pin No. | 2766-1(154) | | Pin No. | | | Pin No. | | | Pin No. | |
| | Dim. L | .560/(14.22) | | Dim. L | | | Dim. L | | | Dim. L | |
| | Dim. X | .295/(7.49) | | Dim. X | | | Dim. X | | | Dim. X | |
| | Dim. Z | .140/(3.56) | | Dim. Z | | | Dim. Z | | | Dim. Z | |
| | No. of Ckts | 2-10 | | No. of Ckts | | | No. of Ckts | | | No. of Ckts | |
| | Void Ckts | NONE | | Void Ckts | | | Void Ckts | | | Void Ckts | |
| | Kink Pins | Yes | | Kink Pins | | | Kink Pins | | | Kink Pins | |
| | Color | - | | Color | | | Color | | | Color | |
| | Packaging | PK-43009-001 | | Packaging | PK-43009-001 | | Packaging | PK-43009-001 | | Packaging | PK-43009-001 |
| Ckt | EDP No. | Engineering No. | Ckt | EDP No. | Engineering No. | Ckt | EDP No. | Engineering No. | Ckt | EDP No. | Engineering No. |
| 2 | 50-34-1995 | A-43009-0107 | 2 | | | 2 | | | 2 | | |
| 3 | 50-34-1996 | A-43009-0108 | 3 | | | 3 | | | 3 | | |
| 4 | 50-34-1997 | A-43009-0109 | 4 | | | 4 | | | 4 | | |
| 5 | 50-34-1998 | A-43009-0110 | 5 | | | 5 | | | 5 | | |
| 6 | 50-34-1999 | A-43009-0111 | 6 | | | 6 | | | 6 | | |
| 7 | 50-30-4401 | A-43009-0112 | 7 | | | 7 | | | 7 | | |
| 8 | 50-30-4402 | A-43009-0113 | 8 | | | 8 | | | 8 | | |
| 9 | 50-30-4403 | A-43009-0114 | 9 | | | 9 | | | 9 | | |
| 10 | 50-30-4404 | A-43009-0115 | 10 | | | 10 | | | 10 | | |
| 11 | | | 11 | | | 11 | | | 11 | | |
| 12 | | | 12 | | | 12 | | | 12 | | |
| 13 | | | 13 | | | 13 | | | 13 | | |
| 14 | | | 14 | | | 14 | | | 14 | | |
| 15 | | | 15 | | | 15 | | | 15 | | |
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| REV: C1 | SEE SHEET 1 2/17/2006 | TITLE: HEADER ASSEMBLY FRICTION LOCK .100 CENTERS | SHEET No. - 5 - |
| DOCUMENT NUMBER: SDA-43009 | CREATED / REVISED BY: DRATNOL | CHECKED BY: SAMIEC | APPROVED BY: MARGULIS |