

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

**Part Number:** [0022436150](#)  
**Status:** **Active**  
**Description:** 2.50mm (.098") Pitch SPOX™ Header, Shrouded, Staggered Footprint, 15 Circuits, White

**Documents:**

[3D Model](#) [Product Specification PS-42219-0001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

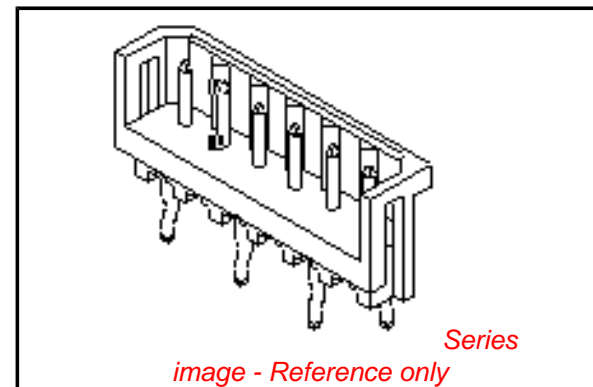
Product Family PCB Headers  
 Series [42249](#)  
 Application Wire-to-Board  
 Product Name SPOX™

**Physical**

Breakaway No  
 Circuits (Loaded) 15  
 Circuits (maximum) 15  
 Color - Resin Natural  
 Durability (mating cycles max) 25  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Lock to Mating Part None  
 Material - Plating Mating Tin  
 Material - Plating Termination Tin  
 Material - Resin Polyester  
 Number of Rows 1  
 Orientation Vertical  
 PC Tail Length (in) 0.130 In  
 PC Tail Length (mm) 3.30 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) 0.098 In  
 Pitch - Mating Interface (mm) 2.50 mm  
 Plating min: Mating (µin) 101.6  
 Plating min: Mating (µm) 2.54  
 Plating min: Termination (µin) 101.6  
 Plating min: Termination (µm) 2.54  
 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**

Current - Maximum per Contact 3A  
 Voltage - Maximum 250V



**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](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**

[42249Series](#)

**Mates With**

[42219](#)

**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**

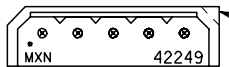
|                 |          |
|-----------------|----------|
| Old Part Number | 4224915A |
|-----------------|----------|

**Reference - Drawing Numbers**

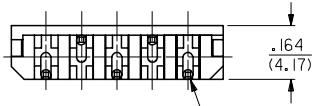
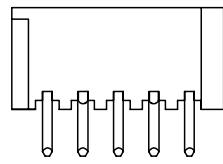
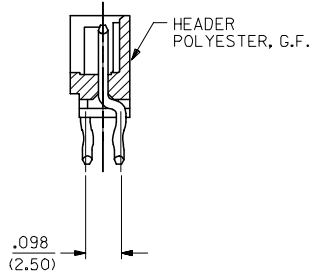
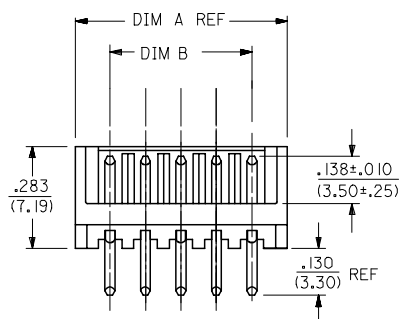
|                           |               |
|---------------------------|---------------|
| Application Specification | AS-42249-001  |
| Product Specification     | PS-42219-0001 |
| Sales Drawing             | SDA-42249-*   |

This document was generated on 06/08/2010

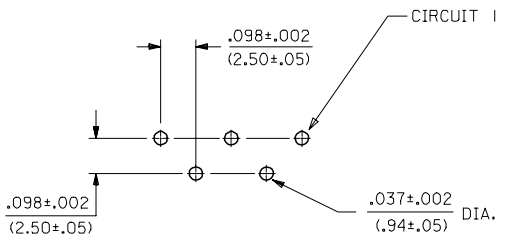
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SQUARE CORNER IS CKT 1 IDENTIFIER



CIRCUIT 1



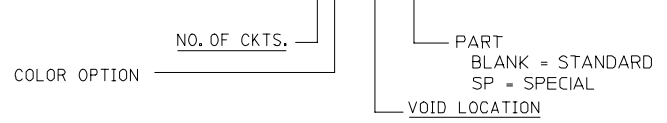
PCB HOLE LAYOUT: COMPONENT SIDE  
RECOMMENDED PCB THICKNESS: .062 (1.57)

NOTES:

- 1) MATERIAL: HEADER : PLOYESTER, GLASS FILLED.  
PIN : BRASS.
- 2) FINISH:  
(154) --100 MICROINCHES (2.54 MICROMETERS) MIN. TIN OVER  
50 MICROINCHES (1.27 MICROMETERS) MIN. NICKEL UNDERPLATE.
- 3) PRODUCT SPECS: PS-42219-0001.
- 4) PACKAGING: PARTS MUST BE PACKAGED IN A 9" X12" ANTI-STATIC POLY-BAG BEFORE PLACING IN CORRUGATED SHIPPING CARTON.
- 5) ANY VOID COMBINATION LEAVING PINS IN ONE ROW ONLY IS NOT AN AVAILABLE OPTION. THE RESULTS WOULD BE MINIMAL BOARD RETENTION.

| NO. OF CKTS. | KINK LOC. | DIM A IN/(MM) | DIM B IN/(MM) |
|--------------|-----------|---------------|---------------|
| 2            | ALL PINS  | .292/(7.42)   | .098/(2.50)   |
| 3            | ALL PINS  | .391/(9.92)   | .197/(5.00)   |
| 4            | ALL PINS  | .489/(12.42)  | .295/(7.50)   |
| 5            | ALL PINS  | .587/(14.92)  | .394/(10.00)  |
| 6            | ALL PINS  | .685/(17.40)  | .492/(12.50)  |
| 7            | ALL PINS  | .783/(19.90)  | .591/(15.00)  |
| 8            | ALL PINS  | .882/(22.40)  | .689/(17.50)  |
| 9            | ALL PINS  | .980/(24.90)  | .787/(20.00)  |
| 10           | ALL PINS  | 1.079/(27.40) | .886/(22.50)  |
| 11           | ALL PINS  | 1.177/(29.90) | .984/(25.00)  |
| 12           | ALL PINS  | 1.276/(32.40) | 1.083/(27.50) |
| 13           | ALL PINS  | 1.374/(34.90) | 1.181/(30.00) |
| 14           | ALL PINS  | 1.472/(37.40) | 1.280/(32.50) |
| 15           | ALL PINS  | 1.571/(39.90) | 1.378/(35.00) |

A-42249-N\*- \*- \*



|   |                               |   |         |                          |                  |   |                        |                             |                     |  |  |
|---|-------------------------------|---|---------|--------------------------|------------------|---|------------------------|-----------------------------|---------------------|--|--|
| REPLACE PIN 42238<br>EC NO: UCP2006-0509<br>DRWNAELHAG<br>CHKD: 2006/03/28<br>APPR:FSM TH<br>2006/03/08<br>2006/03/29 | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)   |         | DIMENSION STYLE<br>IN/MM |                  | SCALE<br>4:1                                    | DESIGN UNITS<br>METRIC | THIRD ANGLE PROJECTION      |                     |  |  |
|   |                               | 4 PLACES ± --- ± ---<br>3 PLACES ± --- ± .010<br>2 PLACES ± 0.25 ± .015<br>1 PLACE ± 0.38 ± --- | mm INCH | DRAWN BY<br>RE           | DATE<br>12/17/88 | FILE<br>2.5 MM HEADER ASSEMBLY (STAGGERED PINS) |                        |                             |                     |  |  |
|   |                               | ANGULAR ±1/2°   |         | CHECKED BY<br>WRL        | DATE<br>12/17/88 | MOLEX INCORPORATED                              |                        |                             |                     |  |  |
|   |                               | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS  |         | APPROVED BY<br>LENZ      | DATE<br>12/17/88 | MATERIAL NO.<br>SEE CHART                       |                        | DOCUMENT NO.<br>SDA-42249-* | SHEET NO.<br>1 OF 4 |  |  |

| A-42249-NA*        |                     |                |           | A-422649-NB*                                       |             |                |              | A-42249-NC* |               |                |              |  |
|--------------------|---------------------|----------------|-----------|--|-------------|----------------|--------------|-------------|---------------|----------------|--------------|--|
| OPTIONS            | HOUSING             | 42249-N        |           | OPTIONS  | HOUSING     | 42249-NA       |              | OPTIONS     | HOUSING       | 42249-NB       |              |  |
|                    | COLOR               | WHITE          |           |  | COLOR       | BLUE           |              |             | COLOR         | BROWN          |              |  |
|                    | PIN NO              | 45613-0001     |           |  | PIN NO      | 45613-0001     |              |             | PIN NO        | 45613-0001     |              |  |
|                    | PLATING             | 154            |           |  | PLATING     | 154            |              |             | PLATING       | 154            |              |  |
| Ckt                | Material No         | Engineering No | Void Ckts | Ckt  | Material No | Engineering No | Void Ckts    | Ckt         | Material No   | Engineering No | Void Ckts    |  |
| 2                  | 22-43-6020          | A-42249-2A     |           | 2  | 22-44-7026  | A-42249-2B     |              | 2           | 22-44-7025    | A-42249-2C     |              |  |
| 3                  | 22-43-6030          | A-42249-3A     |           | 3  | 22-44-7036  | A-42249-3B     |              | 3           | 22-44-7035    | A-42249-3C     |              |  |
| 4                  | 22-43-6040          | A-42249-4A     |           | 4  | 22-44-7046  | A-42249-4B     |              | 4           | 22-44-7045    | A-42249-4C     |              |  |
| 5                  | 22-43-6050          | A-42249-5A     |           | 5  | 22-44-7056  | A-42249-5B     |              | 5           | 22-44-7055    | A-42249-5C     |              |  |
| 6                  | 22-43-6060          | A-42249-6A     |           | 6  |             | A-42249-6B     |              | 6           | 22-44-7065    | A-42249-6C     |              |  |
| 7                  | 22-43-6070          | A-42249-7A     |           | 7  |             | A-42249-7B     |              | 7           | 22-44-7075    | A-42249-7C     |              |  |
| 8                  | 22-43-6080          | A-42249-8A     |           | 8  |             | A-42249-8B     |              | 8           | 22-44-7085    | A-42249-8C     |              |  |
| 9                  | 22-43-6090          | A-42249-9A     |           | 9  |             | A-42249-9B     |              | 9           | 22-44-7095    | A-42249-9C     |              |  |
| 10                 | 22-43-6100          | A-42264910A    |           | 10   |             | A-42264910B    |              | 10          | 22-44-7105    | A-42249-10C    |              |  |
| 11                 | 22-43-6110          | A-42249-11A    |           | 11   |             | A-42249-11B    |              | 11          | 22-44-7115    | A-42249-11C    |              |  |
| 12                 | 22-43-6120          | A-42249-12A    |           | 12   |             | A-42249-12B    |              | 12          | 22-44-7125    | A-42249-12C    |              |  |
| 13                 | 22-43-6130          | A-42249-13A    |           | 13   |             | A-42249-13B    |              | 13          | 22-44-7135    | A-42249-13C    |              |  |
| 14                 | 22-43-6140          | A-42249-14A    |           | 14   |             | A-42249-14B    |              | 14          | 22-44-7145    | A-42249-14C    |              |  |
| 15                 | 22-43-6150          | A-42249-15A    |           | 15   |             | A-42249-15B    |              | 15          | 22-44-7155    | A-42249-15C    |              |  |
|                    | 22-43-6041          | A-42249-4A-2   | 2         |  |             |                |              |             |               |                |              |  |
|                    | 22-43-6042          | A-42249-4A-3   | 3         |  |             |                |              |             |               |                |              |  |
|                    | 22-43-6063          | A-42249-6A-51  | 3,5       |  |             |                |              |             |               |                |              |  |
|                    | 22-43-6064          | A-42249-6A-52  | 2,4       |  |             |                |              |             |               |                |              |  |
|                    | 22-43-6032          | A-42249-3A-3   | 3         |  |             |                |              |             |               |                |              |  |
|                    | 022-43-6073         | A-42249-07A-51 | 2,5       |  |             |                |              |             |               |                |              |  |
|                    | 022-43-6072         | A-42249-07A-3  | 3         |  |             |                |              |             |               |                |              |  |
|                    | 022-43-6074         | A-42249-07A-5  | 5         |  |             |                |              |             |               |                |              |  |
|                    | 022-43-6075         | A-42249-07A-52 | 3,6       |  |             |                |              |             |               |                |              |  |
|                    | 022-43-6061         | A-42249-06A-5  | 5         |  |             |                |              |             |               |                |              |  |
|                    | 022-43-6065         | A-42249-06A-2  | 2         |  |             |                |              |             |               |                |              |  |
| REV:               | ECR/ECN INFORMATION |                |           | TITLE:   |             |                |              |             |               |                | SHEET No.    |  |
| <b>S</b>           | EC NO: UCP2006-0509 |                |           | <b>2.5 MM HEADER ASSEMBLY<br/>(STAGGERED PINS)</b> |             |                |              |             |               |                | <b>- 2 -</b> |  |
|                    | DATE: 3/29/2006     |                |           |  |             |                |              |             |               |                |              |  |
| DOCUMENT NUMBER:   |                     |                |           | CREATED / REVISED BY:                              |             |                | CHECKED BY:  |             | APPROVED BY:  |                |              |  |
| <b>SDA-42249-*</b> |                     |                |           | <b>ELHAG</b>                                       |             |                | <b>ADERR</b> |             | <b>FSMITH</b> |                |              |  |

| A-42249-ND-* |             |                |           | A-42249-NE-* |             |                |           | A-42249-NF-* |             |                |           |
|--------------|-------------|----------------|-----------|--------------|-------------|----------------|-----------|--------------|-------------|----------------|-----------|
| OPTIONS      | HOUSING     | 42249-NR       |           | OPTIONS      | HOUSING     | 42249-NC       |           | OPTIONS      | HOUSING     | 42249-ND       |           |
|              | COLOR       | RED            |           |              | COLOR       | ORANGE         |           |              | COLOR       | YELLOW         |           |
|              | PIN NO      | 45613-0001     |           |              | PIN NO      | 45613-0001     |           |              | PIN NO      | 45613-0001     |           |
|              | PLATING     | 154            |           |              | PLATING     | 154            |           |              | PLATING     | 154            |           |
| Ckt          | Material No | Engineering No | Void Ckts | Ckt          | Material No | Engineering No | Void Ckts | Ckt          | Material No | Engineering No | Void Ckts |
| 2            | 22-44-7022  | A-42249-2D     |           | 2            | 22-44-7024  | A-42249-2E     |           | 2            | 22-44-7021  | A-42249-2F     |           |
| 3            | 22-44-7032  | A-42249-3D     |           | 3            | 22-44-7034  | A-42249-3E     |           | 3            | 22-44-7031  | A-42249-3F     |           |
| 4            | 22-44-7042  | A-42249-4D     |           | 4            | 22-44-7044  | A-42249-4E     |           | 4            | 22-44-7041  | A-42249-4F     |           |
| 5            | 22-44-7052  | A-42249-5D     |           | 5            | 22-44-7054  | A-42249-5E     |           | 5            | 22-44-7051  | A-42249-5F     |           |
| 6            | 22-44-7062  | A-42249-6D     |           | 6            | 22-44-7064  | A-42249-6E     |           | 6            | 22-44-7061  | A-42249-6F     |           |
| 7            | 22-44-7072  | A-42249-7D     |           | 7            | 22-44-7074  | A-42249-7E     |           | 7            | 22-44-7071  | A-42249-7F     |           |
| 8            | 22-44-7082  | A-42249-8D     |           | 8            | 22-44-7084  | A-42249-8E     |           | 8            | 22-44-7081  | A-42249-8F     |           |
| 9            | 22-44-7092  | A-42249-9D     |           | 9            | 22-44-7094  | A-42249-9E     |           | 9            | 22-44-7091  | A-42249-9F     |           |
| 10           | 22-44-7102  | A-42249-10D    |           | 10           | 22-44-7104  | A-42249-10E    |           | 10           | 22-44-7101  | A-42249-10F    |           |
| 11           |             | A-42249-11D    |           | 11           | 22-44-7114  | A-42249-11E    |           | 11           | 22-44-7111  | A-42249-11F    |           |
| 12           | 22-44-7122  | A-42249-12D    |           | 12           | 22-44-7124  | A-42249-12E    |           | 12           | 22-44-7121  | A-42249-12F    |           |
| 13           |             | A-42249-13D    |           | 13           | 22-44-7134  | A-42249-13E    |           | 13           | 22-44-7131  | A-42249-13F    |           |
| 14           |             | A-42249-14D    |           | 14           | 22-44-7144  | A-42249-14E    |           | 14           | 22-44-7141  | A-42249-14F    |           |
| 15           |             | A-42249-15D    |           | 15           | 22-44-7154  | A-42249-15E    |           | 15           | 22-44-7151  | A-42249-15F    |           |
|              | 22-44-7049  | A-42249-4D-2   | 2         |              |             |                |           |              |             |                |           |
|              | 022-44-7048 | A-42249-04D-3  | 3         |              |             |                |           |              |             |                |           |
|              |             |                |           |              |             |                |           |              |             |                |           |
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|  |   |  |                             |
|--|---|--|-----------------------------|
| REV:<br><b>S</b>                       | ECR/ECN INFORMATION<br>EC NO: UCP2006-0509<br>DATE: 3/29/2006 | TITLE:<br><b>2.5 MM HEADER ASSEMBLY<br/>(STAGGERED PINS)</b> | SHEET No.<br><b>- 3 -</b>   |
| DOCUMENT NUMBER:<br><b>SDA-42249-*</b> |   | CREATED / REVISED BY:<br><b>ELHAG</b>                        | CHECKED BY:<br><b>ADERR</b> |
|  |   | APPROVED BY:<br><b>FSMITH</b>                                |                             |

