

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

**Part Number:** [0022447054](#)  
**Status:** **Active**  
**Description:** 2.50mm (.098") Pitch SPOX™ Header, Shrouded, Staggered Footprint, 5 Circuits, Orange

**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) 5  
 Circuits (maximum) 5  
 Durability (mating cycles max) 25  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Lock to Mating Part None  
 Material - Plating Mating Tin  
 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  
 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**

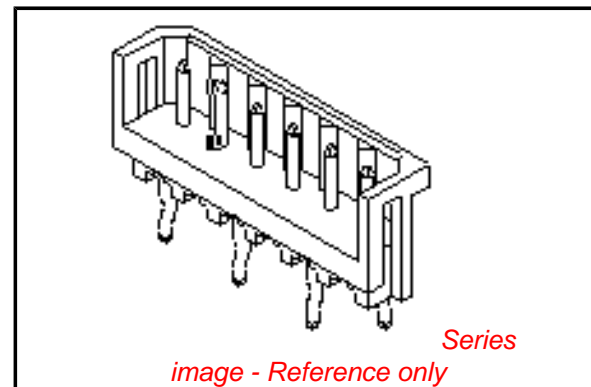
Current - Maximum per Contact 3A  
 Voltage - Maximum 250V

**Solder Process Data**

Lead-free Process Capability Wave Capable (TH only)  
 Process Temperature max. C 230

**Material Info**

**Reference - Drawing Numbers**



**EU RoHS**

**China RoHS**

**Compliance Status**

**Not Reviewed**

**REACH SVHC**

Not Reviewed

**Halogen-Free**

**Status**

**Not Reviewed**

**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**

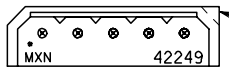
[42219](#)

Application Specification  
Product Specification  
Sales Drawing

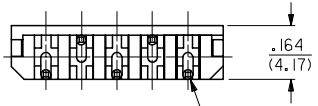
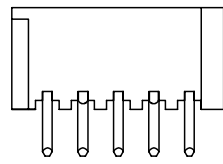
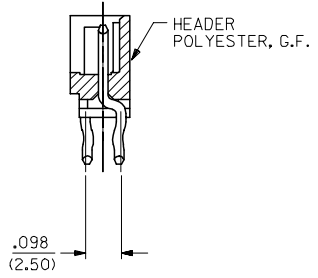
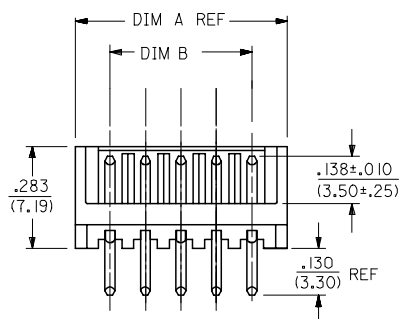
AS-42249-001  
PS-42219-0001  
SDA-42249-\*

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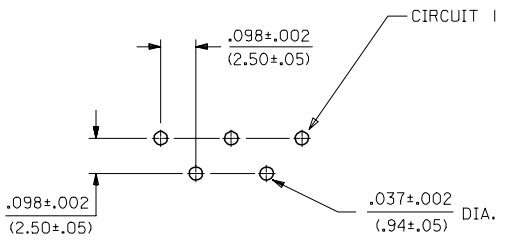
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SQUARE CORNER IS CKT 1 IDENTIFIER



CIRCUIT 1



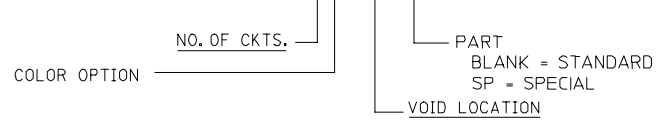
PCB HOLE LAYOUT: COMPONENT SIDE  
RECOMMENDED PCB THICKNESS: .062 (1.57)

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

REV:	ECR/ECN INFORMATION	TITLE:	SHEET No.
<b>S</b>	EC NO: UCP2006-0509	<b>2.5 MM HEADER ASSEMBLY (STAGGERED PINS)</b>	<b>- 3 -</b>
	DATE: 3/29/2006		
<u>DOCUMENT NUMBER:</u>	<u>CREATED / REVISED BY:</u>	<u>CHECKED BY:</u>	<u>APPROVED BY:</u>
<b>SDA-42249-*</b>	<b>ELHAG</b>	<b>ADERR</b>	<b>FSMITH</b>

A-42249-NG-*				A-42249-NH-*				A-42249-NF-*			
OPTIONS	HOUSING	42249-NE		OPTIONS	HOUSING	42249-NG		OPTIONS	HOUSING	42249-ND	
	COLOR	GREEN			COLOR	GREY			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	22-44-7023	A-42249-2G		2		A-42249-2H		2	50-34-9271	A-42249-02F-(154)	
3	22-44-7033	A-42249-3G		3		A-42249-3H		3	50-34-9272	A-42249-03F-(154)	
4	22-44-7043	A-42249-4G		4		A-42249-4H		4	50-34-9273	A-42249-04F-(154)	
5	22-44-7053	A-42249-5G		5		A-42249-5H		5	50-34-9274	A-42249-05F-(154)	
6	22-44-7063	A-42249-6G		6		A-42249-6H		6	50-34-9275	A-42249-06F-(154)	
7	22-44-7073	A-42249-7G		7		A-42249-7H		7	50-34-9276	A-42249-07F-(154)	
8	22-44-7083	A-42249-8G		8		A-42249-8H		8	50-34-9277	A-42249-08F-(154)	
9	22-44-7093	A-42249-9G		9		A-42249-9H		9	50-34-9278	A-42249-09F-(154)	
10	22-44-7103	A-42249-10G		10		A-42249-10H		10	50-34-9279	A-42249-10F-(154)	
11	22-44-7113	A-42249-11G		11		A-42249-11H		11	50-34-9280	A-42249-11F-(154)	
12	22-44-7123	A-42249-12G		12		A-42249-12H		12	50-34-9281	A-42249-12F-(154)	
13	22-44-7133	A-42249-13G		13		A-42249-13H		13	50-34-9282	A-42249-13F-(154)	
14	22-44-7143	A-42249-14G		14		A-42249-14H		14	50-34-9283	A-42249-14F-(154)	
15	22-44-7153	A-42249-15G		15		A-42249-15H		15	50-34-9284	A-42249-15F-(154)	

REV:	ECR/ECN INFORMATION	TITLE:	SHEET No.
<b>S</b>	EC NO: UCP2006-0509	<b>2.5 MM HEADER ASSEMBLY (STAGGERED PINS)</b>	<b>- 4 -</b>
	DATE: 3/29/2006		
<u>DOCUMENT NUMBER:</u> <b>SDA-42249-*</b>		<u>CREATED / REVISED BY:</u> <b>ELHAG</b>	<u>CHECKED BY:</u> <b>ADERR</b>
		<u>APPROVED BY:</u> <b>FSMITH</b>	