

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

**Part Number:** [0705450020](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_sl\\_products](#)  
**Description:** 2.54mm (.100") Pitch SL™ Header, Single Row .120" Pocket Vertical, Shrouded, with Press-fit Plastic Peg, 21 Circuits, Tin (Sn) Plating

**Documents:**

<a href="#">3D Model</a>	<a href="#">Product Specification PS-70400 (PDF)</a>
<a href="#">Packaging Specification (PDF)</a>	<a href="#">Product Specification PS-70541 (PDF)</a>
<a href="#">Drawing (PDF)</a>	<a href="#">RoHS Certificate of Compliance (PDF)</a>

**Agency Certification**

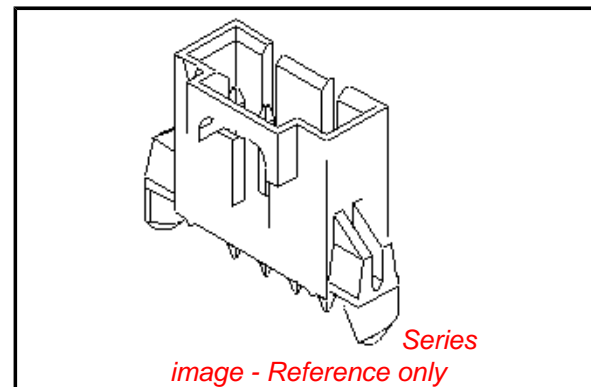
CSA	LR19980
UL	E29179

**General**

Product Family	PCB Headers
Series	<a href="#">70545</a>
Application	Wire-to-Board
Overview	<a href="#">cgrid_sl_products</a>
Product Name	SL™

**Physical**

Breakaway	No
Circuits (Loaded)	21
Circuits (maximum)	21
Color - Resin	Black
Durability (mating cycles max)	25
Flammability	94V-0
Glow-Wire Compliant	No
Lock to Mating Part	Yes
Material - Metal	Brass, Phosphor Bronze
Material - Plating Mating	Tin
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	1
Orientation	Vertical
PC Tail Length (in)	0.130 In
PC Tail Length (mm)	3.30 mm
PCB Locator	Yes
PCB Retention	Yes
PCB Thickness Recommended (in)	0.062 In
PCB Thickness Recommended (mm)	1.60 mm
Packaging Type	Tube
Pitch - Mating Interface (in)	0.100 In
Pitch - Mating Interface (mm)	2.54 mm
Plating min: Mating (µin)	150
Plating min: Mating (µm)	3.75
Plating min: Termination (µin)	150
Plating min: Termination (µm)	3.75
Polarized to Mating Part	Yes
Shrouded	Fully
Stackable	No
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole



*image - Reference only*

**EU RoHS**

**ELV and RoHS Compliant**

**REACH SVHC**

Not Reviewed

**Halogen-Free**

**Status**

**Not Halogen-Free**

**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.

**China RoHS**



**Search Parts in this Series**

[70545Series](#)

**Mates With**

[70066n](#) , [70066g](#) , [70430g](#) , [70400g Housing](#)

**Electrical**

Current - Maximum per Contact

3A

Voltage - Maximum

250V

**Solder Process Data**

Lead-free Process Capability

Wave Capable (TH only)

**Material Info****Reference - Drawing Numbers**

Packaging Specification

PK-70873-0014

Product Specification

PS-70400, PS-70541

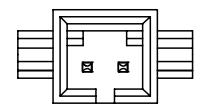
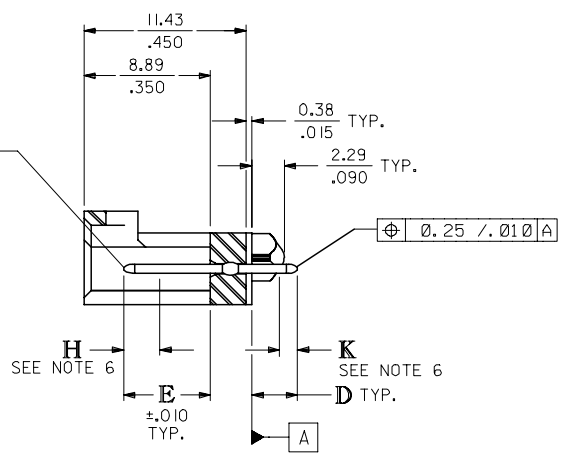
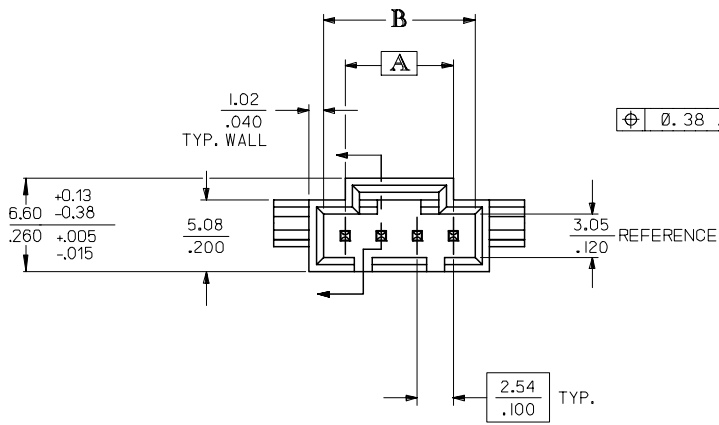
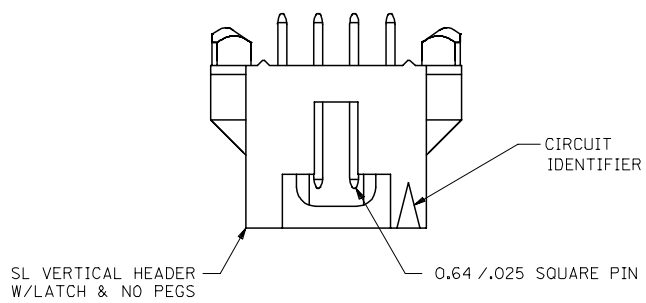
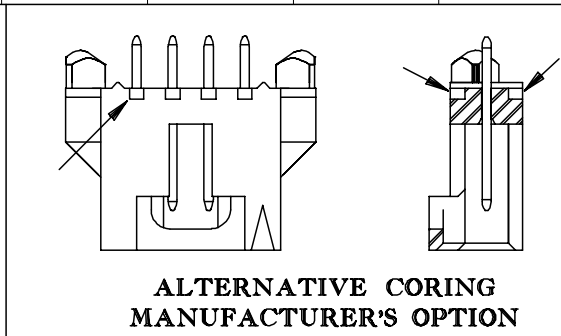
Sales Drawing

SDA-70545-\*\*\*\*

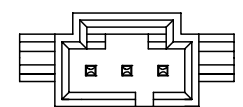
This document was generated on 05/25/2010

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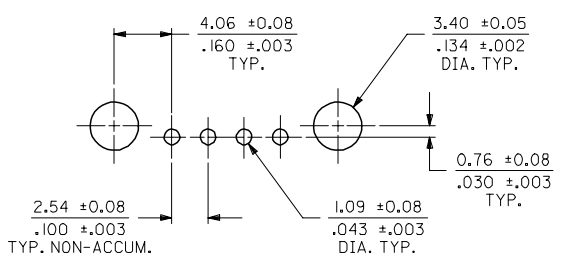
CKT. SIZE	DIM. "A"		DIM. "B"	
	MM	IN.	MM	IN.
2	2.54	.100	5.33±0.08	.210±.003
3	5.08	.200	8.13±0.10	.320±.004
4	7.62	.300	10.67±0.10	.420±.004
5	10.16	.400	13.21±0.10	.520±.004
6	12.70	.500	15.75±0.10	.620±.004
7	15.24	.600	18.29±0.10	.720±.004
8	17.78	.700	20.83±0.10	.820±.004
9	20.32	.800	23.37±0.10	.920±.004
10	22.86	.900	25.91±0.13	1.020±.005
11	25.40	1.000	28.45±0.13	1.120±.005
12	27.94	1.100	30.99±0.13	1.220±.005
13	30.48	1.200	33.53±0.13	1.320±.005
14	33.02	1.300	36.07±0.13	1.420±.005
15	35.56	1.400	38.61±0.15	1.520±.006
16	38.10	1.500	41.15±0.15	1.620±.006
17	40.64	1.600	43.69±0.15	1.720±.006
18	43.18	1.700	46.23±0.15	1.820±.006
19	45.72	1.800	48.77±0.18	1.920±.007
20	48.26	1.900	51.31±0.18	2.020±.007
21	50.80	2.000	53.85±0.18	2.120±.007
22	53.34	2.100	56.39±0.18	2.220±.007
23	55.88	2.200	58.93±0.18	2.320±.007
24	58.42	2.300	61.47±0.18	2.420±.007
25	60.96	2.400	64.01±0.20	2.520±.008



**2 CIRCUIT**



**3 CIRCUIT**



**RECOMMENDED PC BOARD LAYOUT**

(FOR USE WITH 1.57 / .062 THICK BOARD)

- NOTES:
- HEADER MATERIAL: GLASS FILLED POLYESTER, UL94V-0; COLOR: BLACK  
PIN MATERIAL: PHOSPHOR BRONZE
  - FINISH:  
TIN - 0.00381/0.000150 MIN TIN PLATE  
OVER 0.00127/0.000050 MIN NICKEL PLATE  
15 GOLD - 0.00038/0.000015 MIN GOLD PLATE IN SELECT AREA,  
0.00191/0.000075 MIN TIN PLATE IN SELECT AREA,  
OVER 0.00127/0.000050 MIN NICKEL PLATE OVERALL.  
30 GOLD - 0.00076/0.000030 MIN GOLD PLATE IN SELECT AREA,  
0.00191/0.000075 MIN TIN PLATE IN SELECT AREA,  
OVER 0.00127/0.000050 MIN NICKEL PLATE OVERALL.  
\* 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 LEAD.
  - PRODUCT SPECIFICATION: PS-70541
  - PACKAGING SPECIFICATION: PK-70873-0014
  - HEADER TO BE USED WITH OPTION "G" 70400 AND 70430 SERIES SL CONNECTORS.
  - MEASURE POINT FOR PLATING THICKNESS.

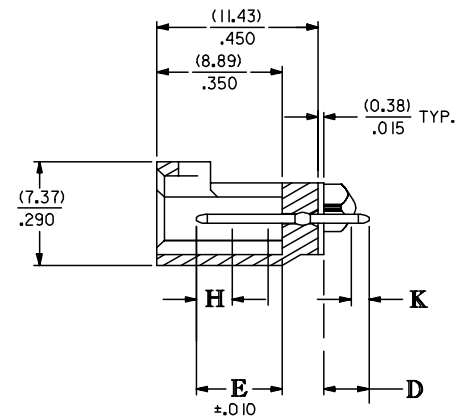
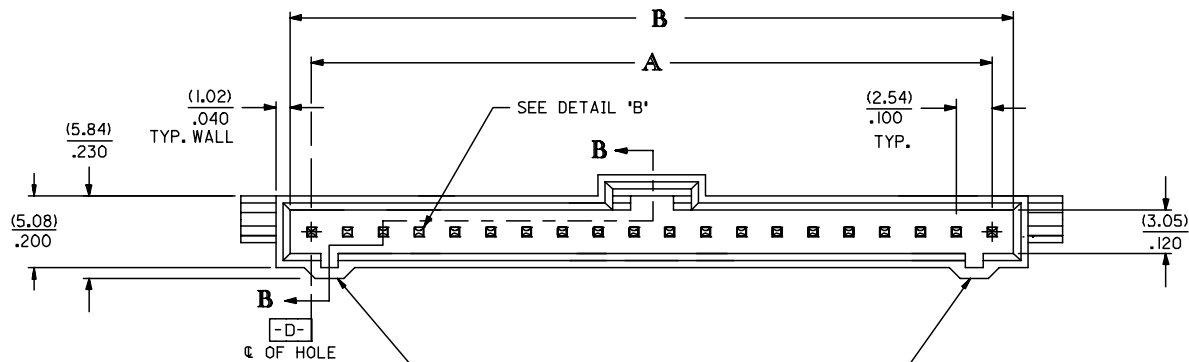
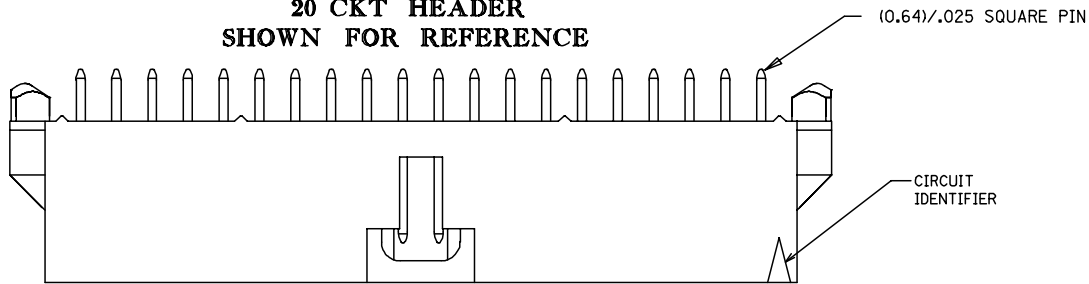
CLARIFY DIM. FC NO: UCP2007-12/16 DRAWN: SIBARRA 2006/11/28 CHKD: BORGAN 2006/12/04 APPR: MILLER 2006/12/05	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
		mm	INCH	DRAWN BY AAB	DATE 05/12/93	TITLE SALES ASSY, SL VERTICAL HEADER W/LATCH&TRI-PEGS (2.54)/.100 CENTERS	MATERIAL NO. SDA-70545-****	SHEET NO. 1 OF 4
4 PLACES ± --- ± ---		3 PLACES ± --- ± .005		CHECKED BY MJM		DATE 05/12/93		MOLEX INCORPORATED
2 PLACES ± 0.13 ± .01		1 PLACE ± 0.25 ± ---		APPROVED BY WAZ		DATE 05/12/93		
ANGULAR ±1/2°		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE CHART		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

4	G1
3	H
2	F1
1	J
SHT/REV	

# OPTIONAL HOUSING

## WEBBED KEYING FEATURES

20 CKT HEADER  
SHOWN FOR REFERENCE



WEBBED KEYING FEATURES

### SECTION B-B

UPDATE TITLE BLOCK EC NO: UCP2006-0202 DRAWN: JLOWE 2005/08/05 CHKD: ADERR 2005/08/05 APPR: FSMITH 2005/08/09 REVISION DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$\nabla=0$ $\nabla=0$	mm      INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .005 2 PLACES ± 0.13 ± .01 1 PLACE ± 0.25 ± --- ANGULAR ± 1/2°	MM/IN	---	INCH		
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE CHART	DRAWN BY DATE WGM 07/10/96 CHECKED BY DATE WGM 07/10/96 APPROVED BY DATE WAZ 07/10/96	TITLE	SALES ASSY, SL VERTICAL HEADER W/LATCH&TRI-PEGS (2.54)/.100 CENTERS	
				MATERIAL NO. SEE CHART SIZE C	DOCUMENT NO. SDA-70545-****	MOLEX INCORPORATED	SHEET NO. 2 OF 4

J	CIRCUIT SIZE	ASSEMBLY ITEM NUMBER 70545	MANUFACTURE RELEASE STATUS				D (± 0.38) ± .015	E (± 0.25) ± .010	CONNECTOR END PLATING			P.C. BOARD END PLATING			J
									TYPE	H MEAS.		TYPE	K MEAS.		
I	2-10	-0001-0009	R.F.M.				(3.30)	(6.10)	TIN	(2.54)	.100	TIN	(1.27)	.050	I
	11-25	-0010-0024	R.F.M.				.130	.240							
H	2-10	-0036-0044	R.F.M.				(3.30)	(6.10)	15 GOLD	(2.54)	.100	TIN	(1.27)	.050	H
	11-25	-0045-0059	R.F.M.				.130	.240							
G	2-10	-0071-0079	R.F.M.				(3.30)	(6.10)	30 GOLD	(2.54)	.100	TIN	(1.27)	.050	G
	11-25	-0080-0094	R.F.M.				.130	.240							
F	2-10	-0141-0149	R.F.M.				(5.21)	(6.10)	15 GOLD	(2.54)	.100	TIN	(1.27)	.050	F
	11-25	-0150-0164	NOT TOOLED				.205	.240							
E	2-10	-0176-0184	R.F.M.				(5.21)	(6.10)	30 GOLD	(2.54)	.100	TIN	(1.27)	.050	E
	11-25	-0185-0199	NOT TOOLED				.205	.240							

F	CIRCUIT SIZE	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER	ASSEMBLY ITEM NUMBER
	2	70545-0001	70545-0036	70545-0071	70545-0141	70545-0176
	3	70545-0002	70545-0037	70545-0072	70545-0142	70545-0177
	4	70545-0003	70545-0038	70545-0073	70545-0143	70545-0178
	5	70545-0004	70545-0039	70545-0074	70545-0144	70545-0179
	6	70545-0005	70545-0040	70545-0075	70545-0145	70545-0180
	7	70545-0006	70545-0041	70545-0076	70545-0146	70545-0181
	8	70545-0007	70545-0042	70545-0077	70545-0147	70545-0182
	9	70545-0008	70545-0043	70545-0078	70545-0148	70545-0183
	10	70545-0009	70545-0044	70545-0079	70545-0149	70545-0184
	11	70545-0010	70545-0045	70545-0080		
	12	70545-0011	70545-0046	70545-0081		
	13	70545-0012	70545-0047	70545-0082		
	14	70545-0013	70545-0048	70545-0083		
	15	70545-0014	70545-0049	70545-0084		
	16	70545-0015	70545-0050	70545-0085		
	17	70545-0016	70545-0051	70545-0086		
	18	70545-0017	70545-0052	70545-0087		
	19	70545-0018	70545-0053	70545-0088		
	20	70545-0019	70545-0054	70545-0089		
	21	70545-0020	70545-0055	70545-0090		
	22	70545-0021	70545-0056	70545-0091		
	23	70545-0022	70545-0057	70545-0092		
	24	70545-0023	70545-0058	70545-0093		
	25	70545-0024	70545-0059	70545-0094		

B	A	CHG D DIM -0141-0199 EC NO: UCP2007-0420 DRAWN: JORGAN 2006/09/15 CHKD: MS BARA 2006/09/15 APPR: SMILLER 2006/09/19 REV:	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr><th></th><th>mm</th><th>INCH</th></tr> <tr><td>4 PLACES</td><td>± .005</td><td>± .0005</td></tr> <tr><td>3 PLACES</td><td>± .01</td><td>± .001</td></tr> <tr><td>2 PLACES</td><td>± 0.13</td><td>± .01</td></tr> <tr><td>1 PLACE</td><td>± 0.25</td><td>± .01</td></tr> <tr><td colspan="3">ANGULAR ±1/2°</td></tr> </table>		mm	INCH	4 PLACES	± .005	± .0005	3 PLACES	± .01	± .001	2 PLACES	± 0.13	± .01	1 PLACE	± 0.25	± .01	ANGULAR ±1/2°			DIMENSION STYLE MM/IN DRAWN BY DATE WGM 07/12/96 CHECKED BY DATE WGM 07/12/96 APPROVED BY DATE DJB 07/12/96 MATERIAL NO. SEE CHART SIZE C	SCALE --- DESIGN UNITS INCH THIRD ANGLE PROJECTION	TITLE SALES ASSY, SL VERTICAL HEADER W/LATCH&TRI-PEGS (2.54)/.100 CENTERS MOLEX INCORPORATED	DOCUMENT NO. SDA-70545-**** SHEET NO. 3 OF 4
						mm	INCH																			
4 PLACES	± .005	± .0005																								
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