

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

**Part Number:** **0713085418**  
**Status:** **Active**  
**Description:** 2.54mm (.100") Pitch C-Grid® Header, Surface Mount, Dual Row, Vertical, 18 Circuits, 1.50µm (59µ") Minimum Bright Tin (Sn) Over Nickel (Ni) Plating, without PCB Locator Pegs

**Documents:**

[3D Model](#) [Product Specification PS-71308 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family PCB Headers  
 Series [71308](#)  
 Application Board-to-Board, Wire-to-Board  
 Product Name C-Grid®

**Physical**

Breakaway Yes  
 Circuits (Loaded) 18  
 Circuits (maximum) 18  
 Color - Resin Black  
 Durability (mating cycles max) 50  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Lock to Mating Part None  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Tin  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 2  
 Orientation Vertical  
 PCB Locator Yes  
 PCB Retention Yes  
 Packaging Type Tube  
 Pitch - Mating Interface (in) 0.100 In  
 Pitch - Mating Interface (mm) 2.54 mm  
 Polarized to PCB No  
 Shrouded No  
 Stackable Yes  
 Temperature Range - Operating -40°C to +105°C  
 Termination Interface: Style Surface Mount

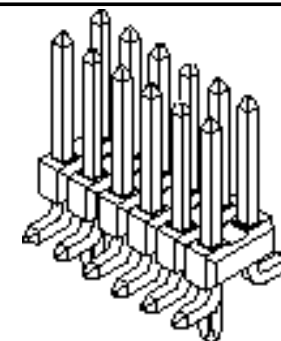
**Electrical**

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

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 40  
 Lead-free Process Capability Reflow Capable (SMT only)  
 Max. Cycles at Max. Process Temperature 3  
 Process Temperature max. C 260

**Material Info**



*Series  
image - Reference only*

**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**  
[71308Series](#)

**Reference - Drawing Numbers**

Product Specification  
Sales Drawing

PS-71308, RPS-71308-001  
SD-71308-001

This document was generated on 04/08/2010

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OPTIONAL  
PICK AND PLACE CAP  
SEE NOTES 4 & 9.

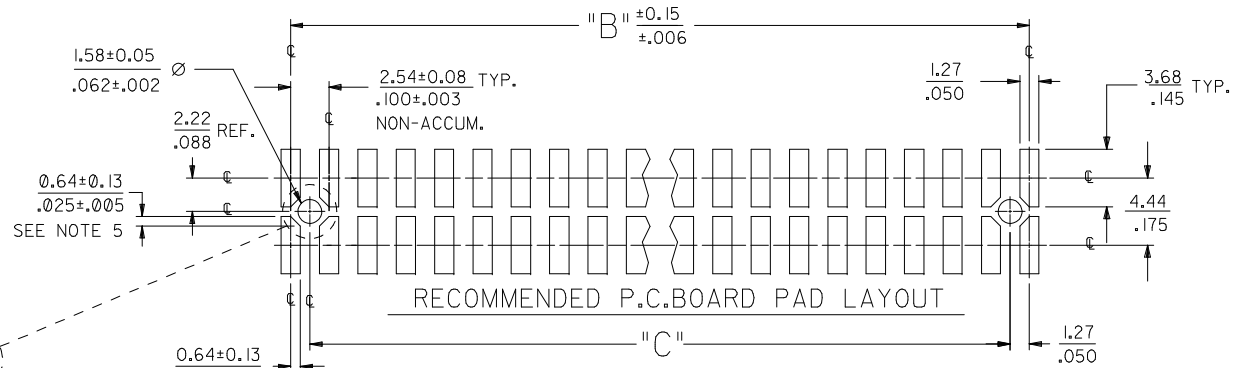


DIM. "M"	DIM. "G"
6.10 .240	10.67 .420
8.13 .320	12.70 .500

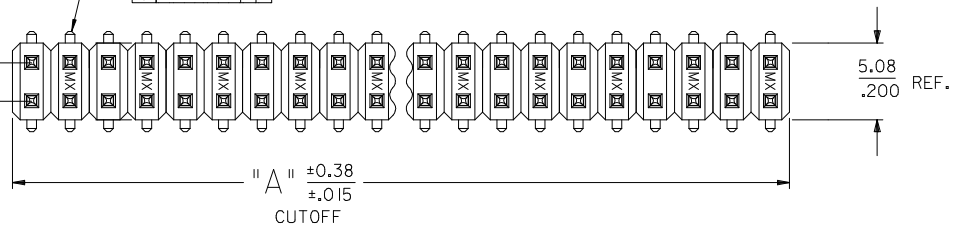
PEG OPTIONS



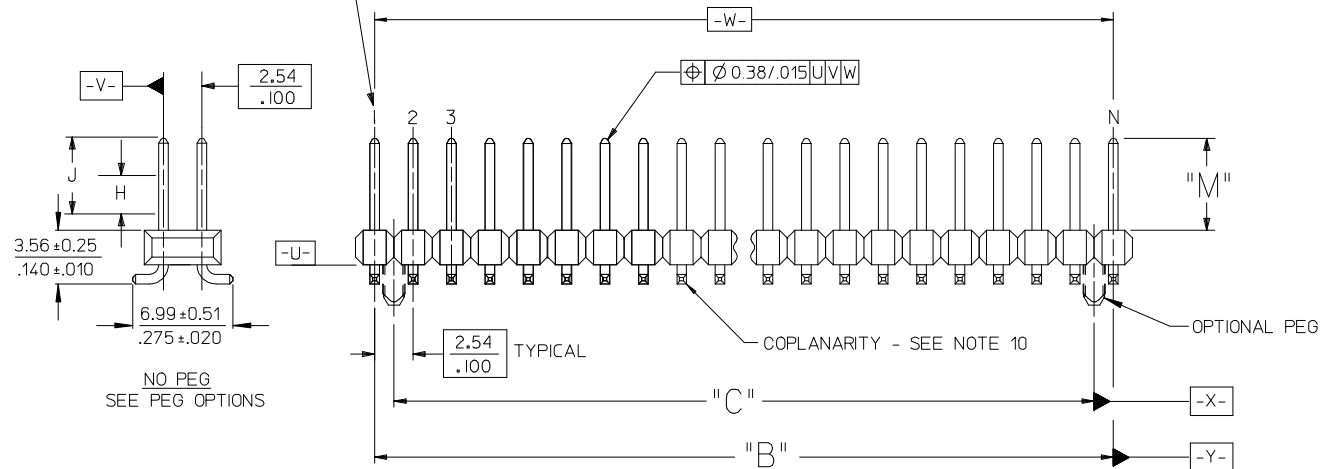
P.C. BOARD PAD LAYOUT  
AT ENDS FOR NO PEG VERSION.



ROW "A"  
ROW "B"



USED TO LOCATE VOIDED CIRCUITS



NOTES:

- MATERIALS: INSULATOR: GLASS FILLED LIQUID CRYSTAL POLYMER (LCP), UL94 V-0, COLOR: BLACK  
TERMINAL: COPPER ALLOY
- FINISH:  
59 TIN - 0.00150/0.00059 MINIMUM BRIGHT TIN OVER NICKEL OVERALL.  
150 TIN - 0.00381/0.00150 MINIMUM BRIGHT TIN OVER NICKEL OVERALL.  
15 GOLD - 0.00038/0.00015 MINIMUM GOLD IN SELECT AREA OVER 0.00191/0.00075 MINIMUM TIN IN SELECT AREA OVER NICKEL OVERALL.  
30 GOLD - 0.00076/0.00030 MINIMUM GOLD IN SELECT AREA OVER 0.00191/0.00075 MINIMUM TIN IN SELECT AREA OVER NICKEL OVERALL.  
50 GOLD - 0.00127/0.00050 MINIMUM GOLD IN SELECT AREA OVER 0.00254/0.00100 MINIMUM TIN IN SELECT AREA OVER NICKEL 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.
- PART TO CONFORM TO PS-71308.
- PACKAGING (SEE CHARTS):  
BULK: PER PK-70873-0353  
TUBES: PER PK-70873-0041.  
71308-82\*\* IN TUBES: PER PK-70873-042.  
TUBES W/ VAC CAPS: PER PK-70873-0691  
TAPE AND REEL W/ VAC CAPS: PER PK-70873-0805.  
SEE SHEET 3 FOR TAPE & REEL PRODUCT WITH SHALLOW POCKET REQUIREMENTS.
- TYP. DIMENSIONS FOR LANDS SURROUNDING HOLES FOR RETENTION PEGS.
- PIN SOLERABILITY PER MOLEX SPEC. ES-152.
- SEE SHEETS 2-5 FOR CHARTED DIMS., PART/EDP NO'S, AND VOIDED CIRCUITS.
- PIN PUSHOUT FORCE: 3 LBS. MINIMUM.
- PICK-N-PLACE CAPS WILL BE PLACED SO THAT VACUUM PICK UP AREA WILL BE IN CENTER OF PART.
- COPLANARITY FOR CIRCUIT SIZES UP TO 40 IS 0.15 MM/0.006 INCH. FOR CIRCUIT SIZES 42 AND LARGER, CONTACT MOLEX SALES DEPARTMENT.
- THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

12CKT TAPE & REEL	DESCRIPTION
EC NO: UCP2009-2465	2009/08/04
DRWN:KIPPER	2009/08/07
CHKD:SSOUSEK	2009/08/10
APPR:FSMITH	2009/08/10
REV	
K3	

QUALITY SYMBOLS
◀=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)	
mm	INCH
4 PLACES ± --- ± ---	
3 PLACES ± --- ± .005	
2 PLACES ± 0.13 ± .010	
1 PLACE ± 0.25 ± ---	
ANGULAR ±1/2°	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
MM/IN			INCH	
DRAWN BY	DATE	TITLE		
KMS	1999/10/15	SALES ASSY INSULATOR		
CHECKED BY	DATE	DUAL ROW SMT W/BREAK-OFF		
KMS	1999/10/15	.025SQ PIN GULLWING .100		
APPROVED BY	DATE	MOLEX MOLEX INCORPORATED		
KMS	1999/10/15	SD-71308-001		
MATERIAL NO.	DOCUMENT NO.	SHEET NO.		
SEE TABLES		1 OF 6		
SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			



IN TAPE AND REEL WITH SHALLOW POCKET TAPE

BULK / IN TUBES

PACKAGING SEE NOTE 4, SHT 1	4-8 CKT	TAPE-N-REEL W/ VAC CAPS	TAPE-N-REEL W/ VAC CAPS							BULK	BULK
	10-100 CKT	TAPE-N-REEL W/ VAC CAPS	TAPE-N-REEL W/ VAC CAPS							TUBES	TUBES
	DIM. M±0.25 MM	6.10 (.240)	6.10 (.240)							8.13 (.320)	13.59 (.535)
	PLATING	30 GOLD	15 GOLD							150 TIN	150 TIN
	DIM. H	2.54 (.100)	2.54 (.100)							4.57 (.180)	4.57 (.180)
	DIM. J	5.08 (.200)	5.08 (.200)							7.11 (.280)	7.11 (.280)

CKTS	DIM. A		DIM. B		EDP NUMBER	EDP NUMBER					EDP NUMBER	EDP NUMBER	CKTS
	MM	IN	MM	IN									
04	5.08	.200	2.54	.100									04
06	7.62	.300	5.08	.200		015-91-6068							06
08	10.16	.400	7.62	.300		015-91-6088							08
10	12.70	.500	10.16	.400		015-91-6108				713088010	71308-8210		10
12	15.24	.600	12.70	.500									12
14	17.78	.700	15.24	.600	015-91-6148								14
16	20.32	.800	17.78	.700						713088016			16
18	22.86	.900	20.32	.800									18
20	25.40	1.000	22.86	.900									20
22	27.94	1.100	25.40	1.000									22
24	30.48	1.200	27.94	1.100									24
26	33.02	1.300	30.48	1.200									26
28	35.56	1.400	33.02	1.300									28
30	38.10	1.500	35.56	1.400									30
32	40.64	1.600	38.10	1.500									32
34	43.18	1.700	40.64	1.600									34
36	45.72	1.800	43.18	1.700									36
38	48.26	1.900	45.72	1.800									38
40	50.80	2.000	48.26	1.900									40
42	53.34	2.100	50.80	2.000									42
44	55.88	2.200	53.34	2.100									44
46	58.42	2.300	55.88	2.200									46
48	60.96	2.400	58.42	2.300									48
50	63.50	2.500	60.96	2.400									50
52	66.04	2.600	63.50	2.500									52
54	68.58	2.700	66.04	2.600									54
56	71.12	2.800	68.58	2.700									56
58	73.66	2.900	71.12	2.800									58
60	76.20	3.000	73.66	2.900									60
62	78.74	3.100	76.20	3.000									62
64	81.28	3.200	78.74	3.100									64
66	83.82	3.300	81.28	3.200									66
68	86.36	3.400	83.82	3.300									68
70	88.90	3.500	86.36	3.400									70
72	91.44	3.600	88.90	3.500									72
74	93.98	3.700	91.44	3.600									74
76	96.52	3.800	93.98	3.700									76
78	99.06	3.900	96.52	3.800									78
80	101.60	4.000	99.06	3.900									80
82	104.14	4.100	101.60	4.000									82
84	106.68	4.200	104.14	4.100									84
86	109.22	4.300	106.68	4.200									86
88	111.76	4.400	109.22	4.300									88
90	114.30	4.500	111.76	4.400									90
92	116.84	4.600	114.30	4.500									92
94	119.38	4.700	116.84	4.600									94
96	121.92	4.800	119.38	4.700									96
98	124.46	4.900	121.92	4.800									98
100	127.00	5.000	124.46	4.900									100

**NO PEG VERSION**  
(ALSO SEE SHEET 2)

SEE SHEET 1 EC NO: UCP2009-2465 DRW:KIPPER 2009/08/04 CHK:SSOUSEK 2009/08/07 APPR:FSMITH 2009/08/10	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
		4 PLACES ± --- ± ---	3 PLACES ± --- ± .005	DRAWN BY KMS	DATE 1999/10/15	TITLE SALES ASSY INSULATOR DUAL ROW SMT W/BREAK-OFF .025SQ PIN GULLWING .100			
		2 PLACES ± 0.13 ± .010	1 PLACE ± 0.25 ± ---	CHECKED BY KMS	DATE 1999/10/15	MOLEX INCORPORATED			
		ANGULAR ±1/2°		APPROVED BY KMS	DATE 1999/10/15	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-71308-001		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SIZE C	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						



13	12	11	10	9	8	6	5	4	3	2	1
		PACKAGING SEE NOTE 4 SHT 1	4-8 CKT	BULK	TAPE-N-REEL W/ VAC CAPS	BULK	TAPE-N-REEL W/ VAC CAPS				
			10-100 CKT	TUBES	TAPE-N-REEL W/ VAC CAPS	TUBES	TAPE-N-REEL W/ VAC CAPS				
		DIM. M±0.25 MM		6.10 (.240)		6.10 (.240)					
		PLATING		30 GOLD		150 TIN					
		DIM. H		2.54 (.100)		2.54 (.100)					
		DIM. J		5.08 (.200)		5.08 (.200)					

CKTS	DIM. A		DIM. B		DIM. C		EDP NUMBER	EDP NUMBER	EDP NUMBER	EDP NUMBER	EDP NUMBER	EDP NUMBER	EDP NUMBER	EDP NUMBER	EDP NUMBER	CKTS
	MM	IN	MM	IN	MM	IN										
04	5.08	.200	2.54	.100	----	----	015-91-1048	015-91-6047								04
06	7.62	.300	5.08	.200	2.54	.100	015-91-1068	015-91-6067	71308-6106	71308-6206						06
08	10.16	.400	7.62	.300	5.08	.200	015-91-1088	015-91-6087	71308-6108	71308-6208						08
10	12.70	.500	10.16	.400	7.62	.300	015-91-1108	015-91-6107	71308-6110	71308-6210						10
12	15.24	.600	12.70	.500	10.16	.400	015-91-1128									12
14	17.78	.700	15.24	.600	12.70	.500	015-91-1148	015-91-6147								14
16	20.32	.800	17.78	.700	15.24	.600	015-91-1168	015-91-6167								16
18	22.86	.900	20.32	.800	17.78	.700	015-91-1188									18
20	25.40	1.000	22.86	.900	20.32	.800	015-91-1208	015-91-6207								20
22	27.94	1.100	25.40	1.000	22.86	.900	015-91-1228									22
24	30.48	1.200	27.94	1.100	25.40	1.000	015-91-1248									24
26	33.02	1.300	30.48	1.200	27.94	1.100	015-91-1268		71308-6126							26
28	35.56	1.400	33.02	1.300	30.48	1.200	015-91-1288									28
30	38.10	1.500	35.56	1.400	33.02	1.300	015-91-1308									30
32	40.64	1.600	38.10	1.500	35.56	1.400	015-91-1328									32
34	43.18	1.700	40.64	1.600	38.10	1.500	015-91-1348									34
36	45.72	1.800	43.18	1.700	40.64	1.600	015-91-1368									36
38	48.26	1.900	45.72	1.800	43.18	1.700	015-91-1388									38
40	50.80	2.000	48.26	1.900	45.72	1.800	015-91-1408	015-91-6407								40
42	53.34	2.100	50.80	2.000	48.26	1.900	015-91-1428									42
44	55.88	2.200	53.34	2.100	50.80	2.000	015-91-1448									44
46	58.42	2.300	55.88	2.200	53.34	2.100	015-91-1468									46
48	60.96	2.400	58.42	2.300	55.88	2.200	015-91-1488									48
50	63.50	2.500	60.96	2.400	58.42	2.300	015-91-1508	015-91-6507								50
52	66.04	2.600	63.50	2.500	60.96	2.400	015-91-1528									52
54	68.58	2.700	66.04	2.600	63.50	2.500	015-91-1548									54
56	71.12	2.800	68.58	2.700	66.04	2.600	015-91-1568									56
58	73.66	2.900	71.12	2.800	68.58	2.700	015-91-1588									58
60	76.20	3.000	73.66	2.900	71.12	2.800	015-91-1608									60
62	78.74	3.100	76.20	3.000	73.66	2.900	015-91-1628									62
64	81.28	3.200	78.74	3.100	76.20	3.000	015-91-1648									64
66	83.82	3.300	81.28	3.200	78.74	3.100	015-91-1668									66
68	86.36	3.400	83.82	3.300	81.28	3.200	015-91-1688									68
70	88.90	3.500	86.36	3.400	83.82	3.300	015-91-1708									70
72	91.44	3.600	88.90	3.500	86.36	3.400	015-91-1728									72
74	93.98	3.700	91.44	3.600	88.90	3.500	015-91-1748									74
76	96.52	3.800	93.98	3.700	91.44	3.600	015-91-1768									76
78	99.06	3.900	96.52	3.800	93.98	3.700	015-91-1788									78
80	101.60	4.000	99.06	3.900	96.52	3.800	015-91-1808									80
82	104.14	4.100	101.60	4.000	99.06	3.900	71308-6082									82
84	106.68	4.200	104.14	4.100	101.60	4.000	71308-6084									84
86	109.22	4.300	106.68	4.200	104.14	4.100	71308-6086									86
88	111.76	4.400	109.22	4.300	106.68	4.200	71308-6088									88
90	114.30	4.500	111.76	4.400	109.22	4.300	71308-6090									90
92	116.84	4.600	114.30	4.500	111.76	4.400	71308-6092									92
94	119.38	4.700	116.84	4.600	114.30	4.500	71308-6094									94
96	121.92	4.800	119.38	4.700	116.84	4.600	71308-6096									96
98	124.46	4.900	121.92	4.800	119.38	4.700	71308-6098									98
100	127.00	5.000	124.46	4.900	121.92	4.800	71308-6100									100

SHORT PEG VERSION (.055")

SEE SHEET 1 EC NO: UCP2009-2465 DRW:MKIPPER 2009/08/04 CHKD:SSOUSEK 2009/08/07 APPR:FSMITH 2009/08/10 K3	QUALITY SYMBOLS 	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE		MOLEX INCORPORATED		SHEET NO. 5 OF 6	
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

