

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

**Part Number:** [0713085420](#)  
**Status:** **Active**  
**Description:** 2.54mm (.100") Pitch C-Grid® Header, Surface Mount, Dual Row, Vertical, 20 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) 20  
 Circuits (maximum) 20  
 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

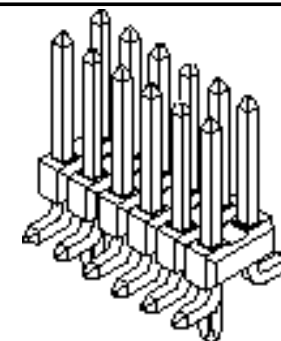
**Electrical**

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.

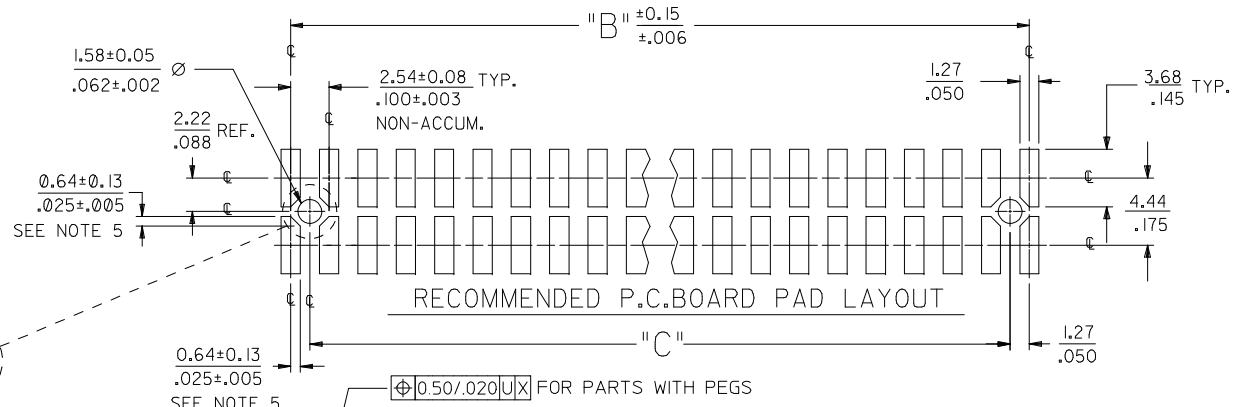


DIM. "M"	DIM. "G"
6.10 .240	10.67 .420
8.13 .320	12.70 .500

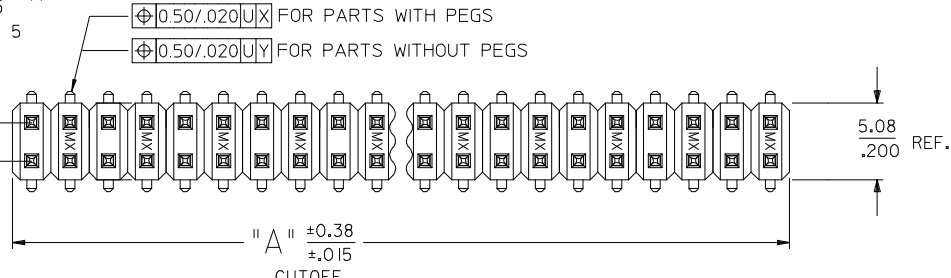
PEG OPTIONS



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

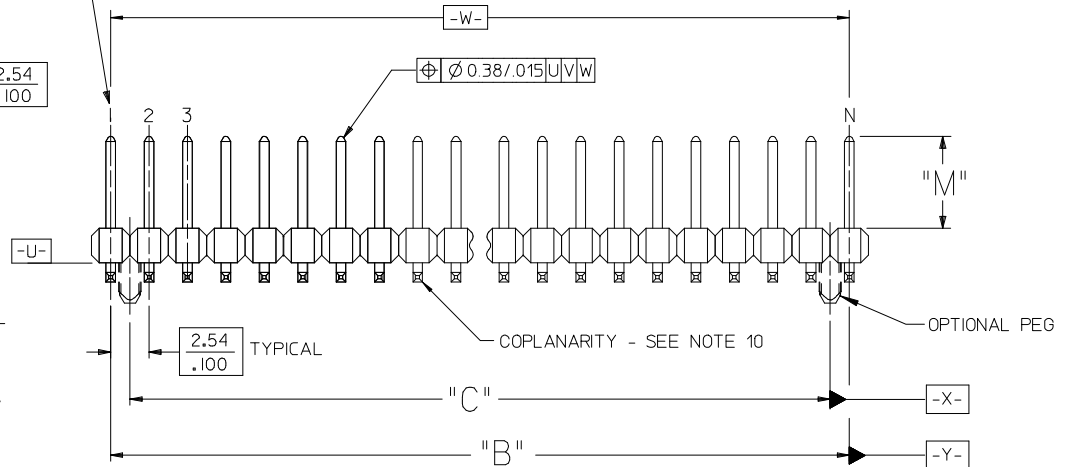
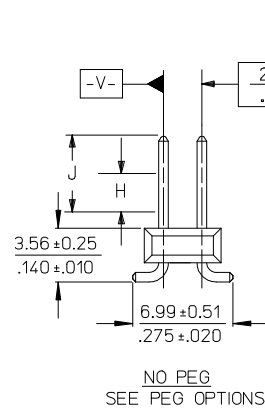


ROW "A"  
ROW "B"



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 EC NO: UCP2009-2465 DRWN:KIPPER 2009/08/04 CHKD:SSOUSEK 2009/08/07 APPR:FSMITH 2009/08/10	REVISION K3	DESCRIPTION	QUALITY SYMBOLS =0 =0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
				mm	INCH	MM/IN	INCH	INCH		
				4 PLACES ± --- ± ---		DRAWN BY	DATE	TITLE		
				3 PLACES ± --- ± .005		KMS	1999/10/15	SALES ASSY INSULATOR DUAL ROW SMT W/BREAK-OFF .025SQ PIN GULLWING .100		
				2 PLACES ± 0.13 ± .010		CHECKED BY	DATE	MOLEX MOLEX INCORPORATED		
				1 PLACE ± 0.25 ± ---		KMS	1999/10/15			
				ANGULAR ±1/2°		APPROVED BY	DATE	DOCUMENT NO.		
						KMS	1999/10/15	SD-71308-001		
						MATERIAL NO.		SHEET NO.		
						SEE TABLES		1 OF 6		
						DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				
						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		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
		mm	INCH	MM/IN		INCH	INCH		
		4 PLACES ± ---	± ---	DRAWN BY	DATE	TITLE			
		3 PLACES ± ---	± .005	KMS	1999/10/15	SALES ASSY INSULATOR DUAL ROW SMT W/BREAK-OFF .025SQ PIN GULLWING .100			
2 PLACES ± 0.13	± .010	CHECKED BY	DATE	MOLEX INCORPORATED					
1 PLACE ± 0.25	± ---	KMS	1999/10/15	MATERIAL NO.		DOCUMENT NO.			
ANGULAR ± 1/2°		APPROVED BY		DATE		SD-71308-001		SHEET NO.	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		KMS		1999/10/15		3 OF 6			
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		
J	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)								

I	CKTS	DIM. A		DIM. B		DIM. C		EDP NUMBER		EDP NUMBER		EDP NUMBER		EDP NUMBER		CKTS
		MM	IN	MM	IN	MM	IN									
H	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
G	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
F	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
E	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
D	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
C	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

SEE SHEET 1  
EC NO: UCP2009-2465  
DRAWN: KIPPER 2009/08/04  
CHKD: SSOUSEK 2009/08/07  
APPR: F SMITH 2009/08/10

QUALITY SYMBOLS  
▽=0  
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)

	mm	INCH
4 PLACES	±.005	±.0005
3 PLACES	±.010	±.0010
2 PLACES	±.013	±.0010
1 PLACE	±.025	±.0010
ANGULAR ±1/2°		

DIMENSION STYLE  
MM/IN

DRAWN BY DATE  
KMS 1999/10/15

CHECKED BY DATE  
KMS 1999/10/15

APPROVED BY DATE  
KMS 1999/10/15

MATERIAL NO.  
SEE TABLE

SCALE  
INCH

DESIGN UNITS  
INCH

THIRD ANGLE PROJECTION

TITLE  
SALES ASSY INSULATOR  
DUAL ROW SMT W/BREAK-OFF  
.025SQ PIN GULLWING .100

MOLEX INCORPORATED

SD-71308-001

SHEET NO.  
5 OF 6

SHORT PEG VERSION (.055")

DRAFT WHERE APPLICABLE  
MUST REMAIN  
WITHIN DIMENSIONS

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