

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0010894046](#)
Status: **Active**
Description: 2.54mm (.100") Pitch C-Grid® Breakaway Header, High Profile, Dual Row, Right Angle, 4 Circuits, 6.10mm (.240") Mating Pin Length, 0.76µm (30µ") Gold (Au) Selective Plating

Documents:

3D Model	Product Specification PS-70216 (PDF)
Packaging Specification (PDF)	RoHS Certificate of Compliance (PDF)
Drawing (PDF)	

Agency Certification

CSA	LR19980
UL	E29179

General

Product Family	PCB Headers
Series	70216
Application	Board-to-Board, Wire-to-Board
Product Name	C-Grid®

Physical

Breakaway	Yes
Circuits (Loaded)	4
Circuits (maximum)	4
Durability (mating cycles max)	50
Flammability	94V-0
Glow-Wire Compliant	No
Lock to Mating Part	None
Material - Metal	Brass, Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Number of Rows	2
Orientation	Right Angle
PC Tail Length (in)	0.110 In
PC Tail Length (mm)	2.79 mm
PCB Locator	No
PCB Retention	None
Packaging Type	Tube
Pitch - Mating Interface (in)	0.100 In
Pitch - Mating Interface (mm)	2.54 mm
Plating min: Mating (µin)	30
Plating min: Mating (µm)	0.75
Plating min: Termination (µin)	75
Plating min: Termination (µm)	1.875
Polarized to Mating Part	No
Polarized to PCB	No
Shrouded	No
Stackable	Yes
Temperature Range - Operating	-40°C to +105°C
Termination Interface: Style	Through Hole

Electrical

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

Solder Process Data

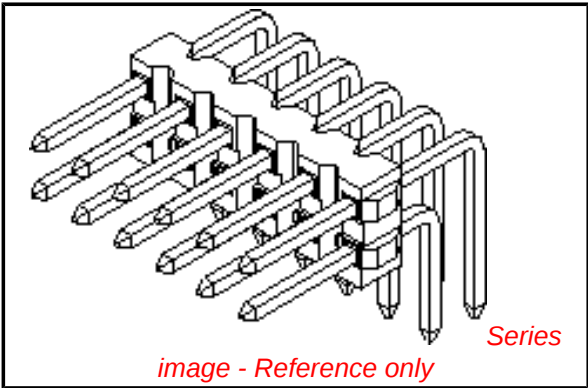


image - Reference only

EU RoHS

**ELV and RoHS
Compliant**
REACH SVHC
Contains SVHC: No
Halogen-Free
Status

China RoHS



Not Reviewed

**Need more information on product
environmental compliance?**

Email 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
[70216Series](#)

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	70216-0391
-----------------	------------

Reference - Drawing Numbers

Product Specification	PS-70216
Sales Drawing	SD-70216-001

This document was generated on 03/29/2010

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

13

12

11

10

9

8

7

6

5

4

3

2

1

J

I

H

G

F

E

D

C

B

A

J

I

H

G

F

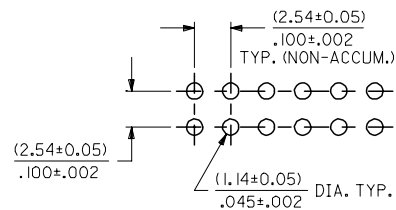
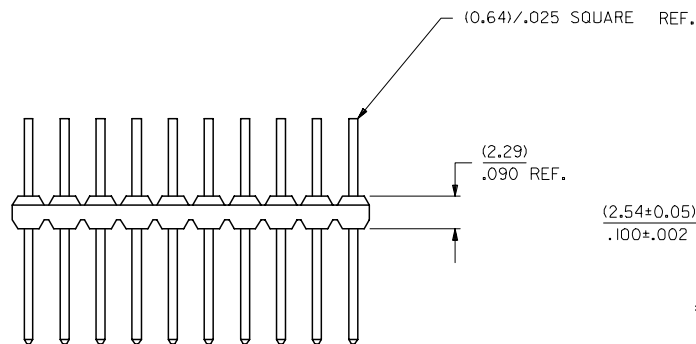
E

D

C

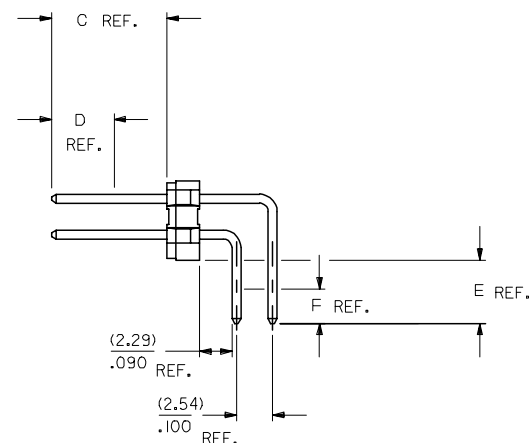
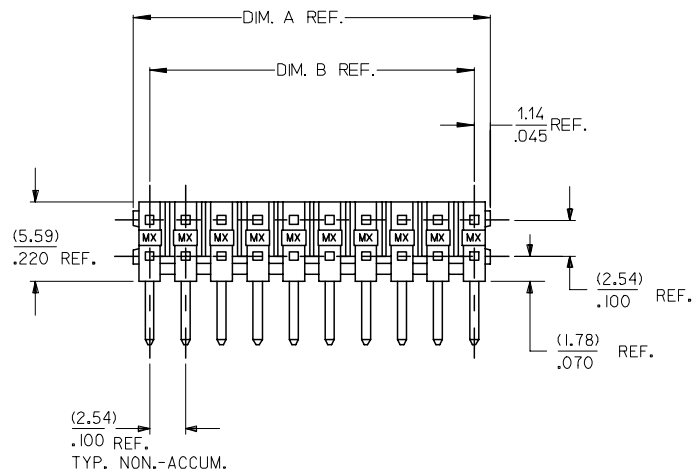
B

A



RECOMMENDED P.C. BOARD HOLE LAYOUT

CKT. SIZE	DIM. A		DIM. B	
	MM	INCH	MM	INCH
04	4.83	.190	2.54	.100
06	7.37	.290	5.08	.200
08	9.91	.390	7.62	.300
10	12.45	.490	10.16	.400
12	14.99	.590	12.70	.500
14	17.53	.690	15.24	.600
16	20.07	.790	17.78	.700
18	22.61	.890	20.32	.800
20	25.15	.990	22.86	.900
22	27.69	1.090	25.40	1.000
24	30.23	1.190	27.94	1.100
26	32.77	1.290	30.48	1.200
28	35.31	1.390	33.02	1.300
30	37.85	1.490	35.56	1.400



NOTES:

- MATERIAL: WAFER - GLASS FILLED, POLYESTER, 94V-0, COLOR: BLACK.
PINS - PHOS. BRONZE.
- FINISH:
TIN - 0.00381/0.000150 MINIMUM TIN OVER 0.00127/0.000050 MINIMUM NICKEL OVERALL.
15 GOLD - 0.00038/0.000015 MINIMUM GOLD PLATE IN SELECTED AREA AND 0.00191/0.000075 MINIMUM TIN IN SELECTED AREA OVER 0.00127/0.000050 MINIMUM NICKEL OVERALL.
30 GOLD - 0.00076/0.000030 MINIMUM GOLD PLATE IN SELECTED AREA AND 0.00191/0.000075 MINIMUM TIN IN SELECTED AREA OVER 0.00121/0.000050 MINIMUM NICKEL OVERALL.
- PRODUCT SPECIFICATION: PS-70216.
- PACKAGING SPECIFICATION: FOR 4, THROUGH 8 CIRCUIT PARTS US PK-70873-0353.
FOR 10 CIRCUITS AND OVER USE PK-70873-0075.
- PIN PUSHOUT FORCE: 4 LBS. MINIMUM.
- FOR ILLUSTRATION PURPOSES, 20 (DUAL 10) CIRCUIT SIZE WAFER IS SHOWN.
- PINS MUST MEET SOLDERABILITY SPEC. NO. 152.
- WAFER TO BE FLAT WITHIN (0.03 MM/CM) OR .003 IN./IN.
- FOR ASSEMBLIES WITH VOIDED PINS, CONTACT MOLEX SALES REPRESENTATIVE.
- THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

ADD NOTE 10
EC NO: UCP2007-1509
DRAWN BY: DER
CHKD: ADERR
APPR: FSI TH
2006/12/19
2006/12/19
2006/12/20

QUALITY SYMBOLS
▽=0
▽=0

GENERAL TOLERANCES (UNLESS SPECIFIED)			
	mm	INCH	
4 PLACES	±.005	±.0005	
3 PLACES	±.01	±.001	
2 PLACES	±.02	±.002	
1 PLACE	±.05	±.005	
ANGULAR ±1/2°			

DRAFT WHERE APPLICABLE
MUST REMAIN
WITHIN DIMENSIONS

DIMENSION STYLE		SCALE	DESIGN UNITS
MM/IN		4:1	INCH
DRAWN BY	DATE	TITLE	
RCB	1994/05/18		
CHECKED BY	DATE	APPROVED BY	
MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
SEE CHART	SD-70216-001		

THIRD ANGLE PROJECTION	
RT. ANG. WAFER ASS'Y 2.54/.100 GRID, DUAL ROW BREAKAWAY 0.64/.025 PINS	
MOLEX INCORPORATED	
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

2-X	A1
1	A1
SHT. REV.	

12

11

10

9

8

7

6

5

4

3

2

1

ENG. NO: A-70216-0079/0092			ENG. NO: A-70216-0118/0131			ENG. NO: A-70216-0235/0248		
DIM. C	(6.10)/.240		DIM. C	(8.13)/.320		DIM. C	(6.10)/.240	
DIM. E (REF.)	(2.79)/.110		DIM. E (REF.)	(2.79)/.110		DIM. E (REF.)	(2.79)/.110	
FINISH	TIN		FINISH	TIN		FINISH	15 GOLD	
CONNECTOR END PLATING	TIN		CONNECTOR END PLATING	TIN		CONNECTOR END PLATING	GOLD	
DIM. D (MEASURE PT.)	(2.54)/.100		DIM. D (MEASURE PT.)	(4.57)/.180		DIM. D (MEASURE PT.)	(2.54)/.100	
P.C. BOARD END PLATING	TIN		P.C. BOARD END PLATING	TIN		P.C. BOARD END PLATING	TIN	
DIM. F (MEASURE PT.)	(1.27)/.050		DIM. F (MEASURE PT.)	(1.27)/.050		DIM. F (MEASURE PT.)	(1.27)/.050	
PACKAGING	SEE NOTE 4 ON SHT. 1		PACKAGING	SEE NOTE 4 ON SHT. 1		PACKAGING	SEE NOTE 4 ON SHT. 1	
CKTS	EDP NUMBER	ENG. NUMBER	CKTS	EDP NUMBER	ENG. NUMBER	CKTS	EDP NUMBER	ENG. NUMBER
04	10-88-3041	A-70216-0079	04	10-88-3042	A-70216-0118	04	10-89-4042	A-70216-0235
06	10-88-3061	A-70216-0080	06	10-88-3062	A-70216-0119	06	10-89-4062	A-70216-0236
08	10-88-3081	A-70216-0081	08	10-88-3082	A-70216-0120	08	10-89-4082	A-70216-0237
10	10-88-3101	A-70216-0082	10	10-88-3102	A-70216-0121	10	10-89-4102	A-70216-0238
12	10-88-3121	A-70216-0083	12	10-88-3122	A-70216-0122	12	10-89-4122	A-70216-0239
14	10-88-3141	A-70216-0084	14	10-88-3142	A-70216-0123	14	10-89-4142	A-70216-0240
16	10-88-3161	A-70216-0085	16	10-88-3162	A-70216-0124	16	10-89-4162	A-70216-0241
18	10-88-3181	A-70216-0086	18	10-88-3182	A-70216-0125	18	10-89-4182	A-70216-0242
20	10-88-3201	A-70216-0087	20	10-88-3202	A-70216-0126	20	10-89-4202	A-70216-0243
22	10-88-3221	A-70216-0088	22	10-88-3222	A-70216-0127	22	10-89-4222	A-70216-0244
24	10-88-3241	A-70216-0089	24	10-88-3242	A-70216-0128	24	10-89-4242	A-70216-0245
26	10-88-3261	A-70216-0090	26	10-88-3262	A-70216-0129	26	10-89-4262	A-70216-0246
28	10-88-3281	A-70216-0091	28	10-88-3282	A-70216-0130	28	10-89-4282	A-70216-0247
30	10-88-3301	A-70216-0092	30	10-88-3302	A-70216-0131	30	10-89-4302	A-70216-0248

REV: A1	<u>ECR/ECN INFORMATION</u>	<u>TITLE:</u> RT. ANG. WAFER ASS'Y 2.54/.100 GRID, DUAL ROW BREAKAWAY 0.64/.025 PINS			<u>SHEET No.</u> - 2 -
	<u>EC No:</u> UCP2007-1509				
	<u>DATE:</u> 2006-12-18				
<u>DOCUMENT NUMBER:</u> SD-70216-001		<u>CREATED / REVISED BY:</u> PRIDDER	<u>CHECKED BY:</u> ADERR	<u>APPROVED BY:</u> FSMITH	

ENG. NO: A-70216-0274/0287			ENG. NO: A-70216-0391/0404			ENG. NO: A-70216-0430/0443		
DIM. C	(8.13)/.320		DIM. C	(6.10)/.240		DIM. C	(8.13)/.320	
DIM. E (REF.)	(2.79)/.110		DIM. E (REF.)	(2.79)/.110		DIM. E (REF.)	(2.79)/.110	
FINISH	15 GOLD		FINISH	30 GOLD		FINISH	30 GOLD	
CONNECTOR END PLATING	GOLD		CONNECTOR END PLATING	GOLD		CONNECTOR END PLATING	GOLD	
DIM. D (MEASURE PT.)	(4.57)/.180		DIM. D (MEASURE PT.)	(2.54)/.100		DIM. D (MEASURE PT.)	(4.57)/.180	
P.C. BOARD END PLATING	TIN		P.C. BOARD END PLATING	TIN		P.C. BOARD END PLATING	TIN	
DIM. F (MEASURE PT.)	(1.27)/.050		DIM. F (MEASURE PT.)	(1.27)/.050		DIM. F (MEASURE PT.)	(1.27)/.050	
PACKAGING	SEE NOTE 4 ON SHT. 1		PACKAGING	SEE NOTE 4 ON SHT. 1		PACKAGING	SEE NOTE 4 ON SHT. 1	
CKTS	EDP NUMBER	ENG. NUMBER	CKTS	EDP NUMBER	ENG. NUMBER	CKTS	EDP NUMBER	ENG. NUMBER
04	10-89-4043	A-70216-0274	04	10-89-4046	A-70216-0391	04	10-89-4047	A-70216-0430
06	10-89-4063	A-70216-0275	06	10-89-4066	A-70216-0392	06	10-89-4067	A-70216-0431
08	10-89-4083	A-70216-0276	08	10-89-4086	A-70216-0393	08	10-89-4087	A-70216-0432
10	10-89-4103	A-70216-0277	10	10-89-4106	A-70216-0394	10	10-89-4107	A-70216-0433
12	10-89-4123	A-70216-0278	12	10-89-4126	A-70216-0395	12	10-89-4127	A-70216-0434
14	10-89-4143	A-70216-0279	14	10-89-4146	A-70216-0396	14	10-89-4147	A-70216-0435
16	10-89-4163	A-70216-0280	16	10-89-4166	A-70216-0397	16	10-89-4167	A-70216-0436
18	10-89-4183	A-70216-0281	18	10-89-4186	A-70216-0398	18	10-89-4187	A-70216-0437
20	10-89-4203	A-70216-0282	20	10-89-4206	A-70216-0399	20	10-89-4207	A-70216-0438
22	10-89-4223	A-70216-0283	22	10-89-4226	A-70216-0400	22	10-89-4227	A-70216-0439
24	10-89-4243	A-70216-0284	24	10-89-4246	A-70216-0401	24	10-89-4247	A-70216-0440
26	10-89-4263	A-70216-0285	26	10-89-4266	A-70216-0402	26	10-89-4267	A-70216-0441
28	10-89-4283	A-70216-0286	28	10-89-4286	A-70216-0403	28	10-89-4287	A-70216-0442
30	10-89-4303	A-70216-0287	30	10-89-4306	A-70216-0404	30	10-89-4307	A-70216-0443

REV: A1	<u>ECR/ECN INFORMATION</u>	<u>TITLE:</u> RT. ANG. WAFER ASS'Y 2.54/.100 GRID, DUAL ROW BREAKAWAY 0.64/.025 PINS			<u>SHEET No.</u> - 3 -
	<u>EC No:</u> UCP2007-1509				
	<u>DATE:</u> 2006-12-18				
<u>DOCUMENT NUMBER:</u> SD-70216-001		<u>CREATED / REVISED BY:</u> PRIDDER	<u>CHECKED BY:</u> ADERR	<u>APPROVED BY:</u> FSMITH	

ENG. NO: A-70216-0313/0326			ENG. NO: A-70216-			ENG. NO: A-70216-		
DIM. C	(6.10)/.240		DIM. C			DIM. C		
DIM. E (REF.)	(4.19)/.165		DIM. E (REF.)			DIM. E (REF.)		
FINISH	15 GOLD		FINISH			FINISH		
CONNECTOR END PLATING	GOLD		CONNECTOR END PLATING			CONNECTOR END PLATING		
DIM. D (MEASURE PT.)	(4.57)/.180		DIM. D (MEASURE PT.)			DIM. D (MEASURE PT.)		
P.C. BOARD END PLATING	TIN		P.C. BOARD END PLATING			P.C. BOARD END PLATING		
DIM. F (MEASURE PT.)	(1.27)/.050		DIM. F (MEASURE PT.)			DIM. F (MEASURE PT.)		
PACKAGING	SEE NOTE 4 ON SHT. 1		PACKAGING			PACKAGING		
CKTS	EDP NUMBER	ENG. NUMBER	CKTS	EDP NUMBER	ENG. NUMBER	CKTS	EDP NUMBER	ENG. NUMBER
04			04			04		
06			06			06		
08			08			08		
10			10			10		
12			12			12		
14			14			14		
16			16			16		
18			18			18		
20			20			20		
22			22			22		
24			24			24		
26			26			26		
28			28			28		
30	50-34-8535	A-70216-0326	30			30		

A1	REV:	ECR/ECN INFORMATION	TITLE:	RT. ANG. WAFER ASS'Y 2.54/.100 GRID, DUAL ROW BREAKAWAY 0.64/.025 PINS	SHEET No. - 4 -
		EC No: UCP2007-1509			
		DATE: 2006-12-18			
DOCUMENT NUMBER: SD-70216-001			CREATED / REVISED BY: PRIDDER	CHECKED BY: ADERR	APPROVED BY: FSMITH