

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

**Part Number:** [0741640072](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_sl\\_products](#)  
**Description:** 2.54mm (.100") Pitch C-Grid® Receptacle, Right Angle, Through Hole, Dual Row, Shrouded with Pegs, Version A, High-Temperature, 72 Circuits, 0.4µm (15µ") Gold (Au)

**Documents:**

[3D Model](#) [Product Specification PS-74164-001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family PCB Receptacles  
 Series [74164](#)  
 Application Board-to-Board  
 Overview [cgrid\\_sl\\_products](#)  
 Product Name C-Grid®

**Physical**

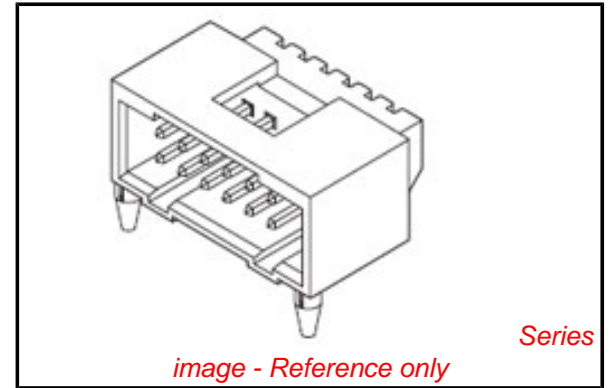
Circuits (Loaded) 72  
 Circuits (maximum) 72  
 Color - Resin Black  
 Durability (mating cycles max) 50  
 Glow-Wire Compliant No  
 Guide to Mating Part No  
 Keying to Mating Part None  
 Lock to Mating Part Yes  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Performance Thermoplastic  
 Number of Rows 2  
 Orientation Right Angle  
 PCB Locator Yes  
 PCB Retention None  
 Packaging Type Tube  
 Pitch - Mating Interface (in) 0.100 In  
 Pitch - Mating Interface (mm) 2.54 mm  
 Pitch - Term. Interface (in) 0.100 In  
 Pitch - Term. Interface (mm) 2.54 mm  
 Plating min: Mating (µin) 0.4  
 Plating min: Mating (µm) 15  
 Polarized to Mating Part No  
 Polarized to PCB No  
 Robotic Placement None  
 Stackable No  
 Surface Mount Compatible (SMC) No  
 Temperature Range - Operating -40°C to +105°C  
 Termination Interface: Style Through Hole

**Electrical**

Current - Maximum per Contact 2.5A  
 Grounding to PCB No  
 Voltage - Maximum 250V

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 5



*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](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**

[74164Series](#)

Lead-free Process Capability  
Max. Cycles at Max. Process Temperature  
Process Temperature max. C

Wave Capable (TH only)  
1  
260

**Material Info**

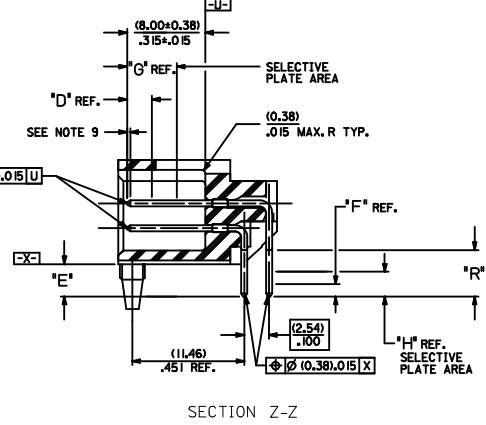
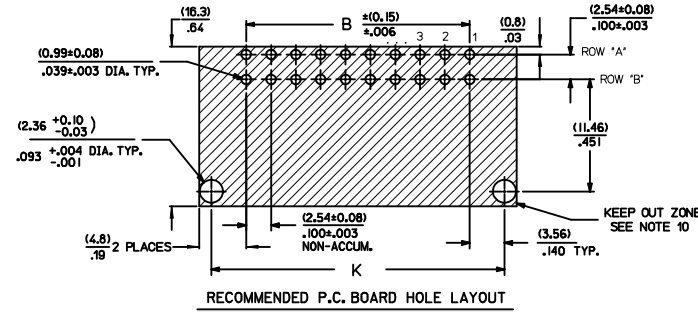
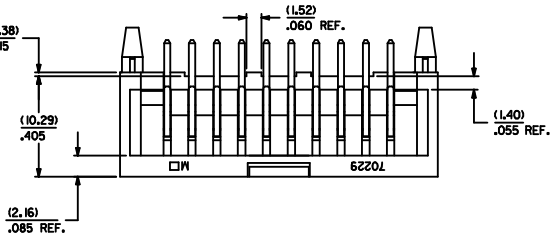
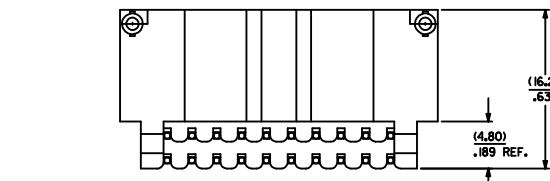
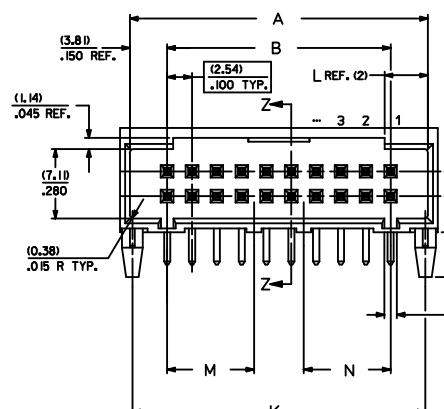
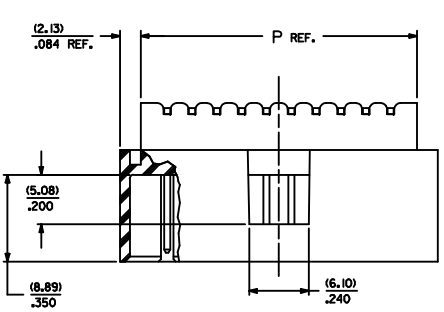
**Reference - Drawing Numbers**

Packaging Specification  
Product Specification  
Sales Drawing

PK-70873-0019  
PS-74164-001  
SD-74164-001

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- NOTES
- MATERIAL: SHROUDED WAFER: GLASS FILLED, LIQUID CRYSTAL POLYMER, COLOR: BLACK, UL94V-0  
PINS: PHOSPHOR BRONZE
  - FINISH:  
TIN - 3.81 MICROMETERS/150 MICROINCHES MINIMUM TIN PLATE OVER NICKEL UNDERPLATE OVERALL  
15 GOLD - 0.38 MICROMETERS/15 MICROINCHES MINIMUM GOLD PLATE IN SELECT AREA  
1.91 MICROMETERS/75 MICROINCHES MINIMUM TIN PLATE IN SELECT AREA OVER NICKEL UNDERPLATE OVERALL  
30 GOLD - 0.76 MICROMETERS/30 MICROINCHES MINIMUM GOLD PLATE IN SELECT AREA  
1.91 MICROMETERS/75 MICROINCHES MINIMUM TIN PLATE IN SELECT AREA OVER NICKEL UNDERPLATE OVERALL  
50 GOLD - 1.27 MICROMETERS/50 MICROINCHES MINIMUM GOLD PLATE IN SELECT AREA  
1.91 MICROMETERS/75 MICROINCHES MINIMUM TIN PLATE IN SELECT AREA OVER NICKEL UNDERPLATE OVERALL
  - PRODUCT SPECIFICATION: PS-74164-0001
  - PACKAGING INFORMATION: SEE CHART
  - 20 CIRCUIT SIZE SHOWN FOR ILLUSTRATION PURPOSES.
  - PIN PUSHOUT FORCE: (17.79 N)/4 LBS.
  - PINS MUST MEET SOLDERABILITY SPEC. MIL-STD-202 METHOD 208B.
  - FOR CHARTED DIMENSIONS AND ASSEMBLY NO.S NOT SHOWN ON THIS SHEET - SEE SHEET 2.
  - ROW TO ROW PIN HEIGHT VARIATION MUST NOT EXCEED (0.25)/.010 IN.
  - NO FEATURES WHICH RISE ABOVE THE PCB SURFACE ALLOWED IN THIS AREA
  - THIS PART CONFORMS TO CLASS B REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.

CKT.	DIM. 'A'	DIM. 'B'	DIM. 'K'	DIM. 'L'	DIM. 'M'	DIM. 'N'	DIM. 'P'
06	(12.70) .500	(5.08) .200	(12.19) .480	(3.30) .130			(10.46) .412
08	(15.24) .600	(7.62) .300	(14.73) .580	(4.42) .174			(13.00) .512
10	(17.78) .700	(10.16) .400	(17.27) .680	(4.42) .174			(15.54) .612
12	(20.32) .800	(12.70) .500	(19.81) .780	(4.42) .174			(18.08) .712
14	(22.86) .900	(15.24) .600	(22.35) .880	(4.42) .174			(20.62) .812
16	(25.40) 1.000	(17.78) .700	(24.89) .980	(4.42) .174			(23.16) .912
18	(27.94) 1.100	(20.32) .800	(27.43) 1.080	(4.42) .174			(25.70) 1.012
20	(30.48) 1.200	(22.86) .900	(29.97) 1.180	(4.42) .174			(28.24) 1.112
22	(33.02) 1.300	(25.40) 1.000	(32.51) 1.280	(4.42) .174			(30.78) 1.212
24	(35.56) 1.400	(27.94) 1.100	(35.05) 1.380	(4.42) .174	(16.64) .655		(33.32) 1.312
26	(38.10) 1.500	(30.48) 1.200	(37.59) 1.480	(4.42) .174	(16.64) .655		(35.86) 1.412
28	(40.64) 1.600	(33.02) 1.300	(40.13) 1.580	(4.42) .174	(16.64) .655		(38.40) 1.512
30	(43.18) 1.700	(35.56) 1.400	(42.67) 1.680	(4.42) .174	(16.64) .655		(40.94) 1.612
32	(45.72) 1.800	(38.10) 1.500	(45.21) 1.780	(4.42) .174	(16.64) .655		(43.48) 1.712
34	(48.26) 1.900	(40.64) 1.600	(47.75) 1.880	(4.42) .174	(16.64) .655	(16.76) .660	(46.02) 1.812
36	(50.80) 2.000	(43.18) 1.700	(50.29) 1.980	(4.42) .174	(16.64) .655	(16.76) .660	(48.56) 1.912
38	(53.34) 2.100	(45.72) 1.800	(52.83) 2.080	(4.42) .174	(16.64) .655	(16.76) .660	(51.10) 2.012
40	(55.88) 2.200	(48.26) 1.900	(55.37) 2.180	(4.42) .174	(16.64) .655	(16.76) .660	(53.64) 2.112
42	(58.42) 2.300	(50.80) 2.000	(57.91) 2.280	(4.42) .174	(16.64) .655	(16.76) .660	(56.18) 2.212
44	(60.96) 2.400	(53.34) 2.100	(60.45) 2.380	(4.42) .174	(16.64) .655	(16.76) .660	(58.72) 2.312
46	(63.50) 2.500	(55.88) 2.200	(62.99) 2.480	(4.42) .174	(16.64) .655	(16.76) .660	(61.26) 2.412
48	(66.04) 2.600	(58.42) 2.300	(65.53) 2.580	(4.42) .174	(16.64) .655	(16.76) .660	(63.80) 2.512
50	(68.58) 2.700	(60.96) 2.400	(68.07) 2.680	(4.42) .174	(16.64) .655	(16.76) .660	(66.34) 2.612
52	(71.12) 2.800	(63.50) 2.500	(70.61) 2.780	(4.42) .174	(16.64) .655	(16.76) .660	(68.88) 2.712
54	(73.66) 2.900	(66.04) 2.600	(73.15) 2.880	(4.42) .174	(16.64) .655	(16.76) .660	(71.42) 2.812
56	(76.20) 3.000	(68.58) 2.700	(75.69) 2.980	(4.42) .174	(16.64) .655	(16.76) .660	(73.96) 2.912
58	(78.74) 3.100	(71.12) 2.800	(78.23) 3.080	(4.42) .174	(16.64) .655	(16.76) .660	(76.50) 3.012
60	(81.28) 3.200	(73.66) 2.900	(80.77) 3.180	(4.42) .174	(16.64) .655	(16.76) .660	(79.04) 3.112
62	(83.82) 3.300	(76.20) 3.000	(83.31) 3.280	(4.42) .174	(16.64) .655	(16.76) .660	(81.58) 3.212
64	(86.36) 3.400	(78.74) 3.100	(85.85) 3.380	(4.42) .174	(16.64) .655	(16.76) .660	(84.12) 3.312
66	(88.90) 3.500	(81.28) 3.200	(88.39) 3.480	(4.42) .174	(16.64) .655	(16.76) .660	(86.66) 3.412
68	(91.44) 3.600	(83.82) 3.300	(90.93) 3.580	(4.42) .174	(16.64) .655	(16.76) .660	(89.20) 3.512
70	(93.98) 3.700	(86.36) 3.400	(93.47) 3.680	(4.42) .174	(16.64) .655	(16.76) .660	(91.74) 3.612
72	(96.52) 3.800	(88.90) 3.500	(96.01) 3.780	(4.42) .174	(16.64) .655	(16.76) .660	(94.28) 3.712

INITIAL RELEASE EC NO: UCP 2009-1776 DRAWN BY: MIBARRA CHK BY: BBARKER APPR: SMILLER DATE: 2009/03/30 DATE: 2009/03/30 DATE: 2009/03/31	QUALITY SYMBOLS 0=0 1=0	GENERAL TOLERANCES (UNLESS SPECIFIED) DIMENSIONS: mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .010 2 PLACES ± 0.25 ± .014 1 PLACE ± 0.36 ± --- ANGULAR ±1/2°	DIMENSION STYLE MM/IN	SCALE INCH	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY: MIBARRA CHECKED BY: BBARKER APPROVED BY: SMILLER DATE: 2009/03/30 DATE: 2009/03/30 DATE: 2009/03/30	MATERIAL NO. SEE TABLE	DOCUMENT NO. SD-74164-001	TITLE SALES ASSEMBLY RIGHT ANGLE SHROUDED W/PC BOARD STAB PEGS

ITEM NUMBER 74164	E REF	R REF	PLATING FINISH	CONNECTOR END PLATING			PC BOARD END PLATING			INFORMATION PK-70873	VOIDED CIRCUITS	
				TYPE	G LENGTH	D MEAS.	TYPE	H LENGTH	F MEAS.			
-0006-0072	3.30 .130	4.75 .187	15 GOLD	GOLD	5.08 .200	2.54 .100		TIN	3.81 .150	2.54 .100	0019	
-0106-0172	3.30 .130	4.75 .187	TIN	TIN		2.54 .100		TIN		2.54 .100	0019	
-0206-0272	3.30 .130	4.75 .187	50 GOLD	GOLD	5.08 .200	2.54 .100		TIN	3.81 .150	2.54 .100	0019	
-0306-0372	3.30 .130	4.75 .187	30 GOLD	GOLD	5.08 .200	2.54 .100		TIN	3.81 .150	2.54 .100	0019	
-3001	3.30 .130	4.75 .187	15 GOLD	GOLD	5.08 .200	2.54 .100		TIN	3.81 .150	2.54 .100	0019	A14, A15, A16, A18, A19, A22, A23 B14, B15, B16, B18, B19, B22, B23

NO. OF CKTS	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER	ITEM NUMBER
6	74164-0006	74164-0106	74164-0206	74164-0306			
8	74164-0008	74164-0108	74164-0208	74164-0308			
10	74164-0010	74164-0110	74164-0210	74164-0310			
12	74164-0012	74164-0112	74164-0212	74164-0312			
14	74164-0014	74164-0114	74164-0214	74164-0314			
16	74164-0016	74164-0116	74164-0216	74164-0316			
18	74164-0018	74164-0118	74164-0218	74164-0318			
20	74164-0020	74164-0120	74164-0220	74164-0320			
22	74164-0022	74164-0122	74164-0222	74164-0322			
24	74164-0024	74164-0124	74164-0224	74164-0324			
26	74164-0026	74164-0126	74164-0226	74164-0326			
28	74164-0028	74164-0128	74164-0228	74164-0328			
30	74164-0030	74164-0130	74164-0230	74164-0330			
32	74164-0032	74164-0132	74164-0232	74164-0332			
34	74164-0034	74164-0134	74164-0234	74164-0334			
36	74164-0036	74164-0136	74164-0236	74164-0336			
38	74164-0038	74164-0138	74164-0238	74164-0338			
40	74164-0040	74164-0140	74164-0240	74164-0340			
42	74164-0042	74164-0142	74164-0242	74164-0342			
44	74164-0044	74164-0144	74164-0244	74164-0344			
46	74164-0046	74164-0146	74164-0246	74164-0346			
48	74164-0048	74164-0148	74164-0248	74164-0348			
50	74164-0050	74164-0150	74164-0250	74164-0350		74164-3001	
52	74164-0052	74164-0152	74164-0252	74164-0352			
54	74164-0054	74164-0154	74164-0254	74164-0354			
56	74164-0056	74164-0156	74164-0256	74164-0356			
58	74164-0058	74164-0158	74164-0258	74164-0358			
60	74164-0060	74164-0160	74164-0260	74164-0360			
62	74164-0062	74164-0162	74164-0262	74164-0362			
64	74164-0064	74164-0164	74164-0264	74164-0364			
66	74164-0066	74164-0166	74164-0266	74164-0366			
68	74164-0068	74164-0168	74164-0268	74164-0368			
70	74164-0070	74164-0170	74164-0270	74164-0370			
72	74164-0072	74164-0172	74164-0272	74164-0372			

<b>INITIAL RELEASE</b> EC NO: UCP2009-1776 DRAWN BY: MIBARRA 2009/03/30 CHECKED BY: BBARKER 2009/04/20 APPR: SMILLER 2009/04/21 REV: DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	$\nabla=0$ $\nabla=0$	4 PLACES ±.005 ±.005 3 PLACES ±.010 ±.010 2 PLACES ±.025 ±.014 1 PLACE ±.036 ±.010 ANGULAR ±1/2°	MM/INCH	MM/INCH	INCH	INCH	DRAWN BY: MIBARRA 2009/03/30 CHECKED BY: BBARKER 2009/03/30 APPROVED BY: SMILLER 2009/03/30
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	MATERIAL NO.	DOCUMENT NO.	SALES ASSEMBLY RIGHT ANGLE SHROUDED W/PC BOARD STAB PEGS MOLEX INCORPORATED		SHEET NO. 2 OF 2
		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					SD-74164-001