

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

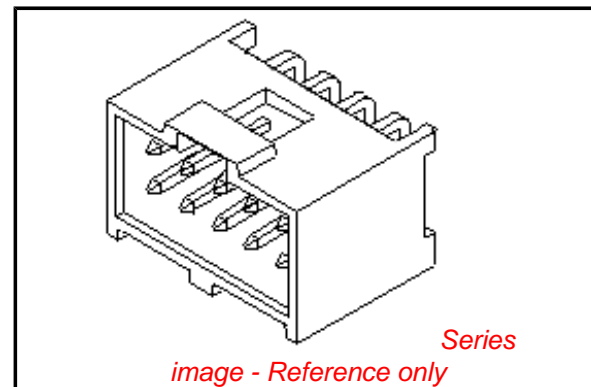
**Part Number:** [0918143118](#)  
**Status:** **Active**  
**Overview:** [cgrid\\_iii](#)  
**Description:** 2.54mm (.100") Pitch C-Grid III™ Dual Row Right Angle Shrouded Header, 18 Circuits, Tin (Sn) over Nickel (Ni)

**Documents:**

[3D Model](#) [Product Specification PS-99020-0001 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**General**

Product Family	PCB Headers
Series	<a href="#">91814</a>
Application	Wire-to-Board
Overview	<a href="#">cgrid_iii</a>
Product Name	C-Grid III™
<b>Physical</b>	
Breakaway	No
Circuits (Loaded)	18
Circuits (maximum)	18
Color - Resin	Black
Durability (mating cycles max)	30
First Mate / Last Break	No
Glow-Wire Compliant	No
Guide to Mating Part	No
Keying to Mating Part	None
Lock to Mating Part	None
Material - Metal	Brass
Material - Plating Mating	Tin
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Right Angle
PC Tail Length (in)	0.083 In
PC Tail Length (mm)	2.10 mm
PCB Locator	No
PCB Retention	None
PCB Thickness Recommended (in)	0.063 In
PCB Thickness Recommended (mm)	1.60 mm
Packaging Type	Tray
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)	120
Plating min: Mating (µm)	3
Plating min: Termination (µin)	120
Plating min: Termination (µm)	3
Polarized to Mating Part	Yes
Polarized to PCB	No
Shrouded	Closed Ends
Stackable	No
Surface Mount Compatible (SMC)	Yes
Temperature Range - Operating	-55°C to +125°C
Termination Interface: Style	Through Hole



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC**  
 Not Reviewed  
**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**

[91814Series](#)

**Mates With**

[90142 C-Grid III™ Crimp Housing](#). [90119 C-Grid III™ Crimp Terminal](#)

**Electrical**

Current - Maximum per Contact	3A
Voltage - Maximum	350V AC/DC

**Solder Process Data**

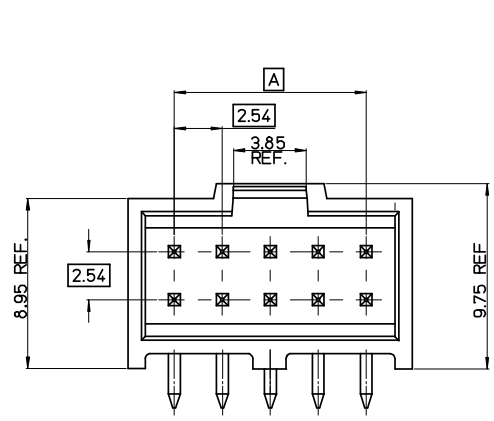
Duration at Max. Process Temperature (seconds)	5
Lead-free Process Capability	Reflow Capable (SMT only)
Max. Cycles at Max. Process Temperature	1
Process Temperature max. C	260

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

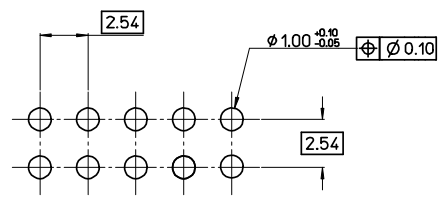
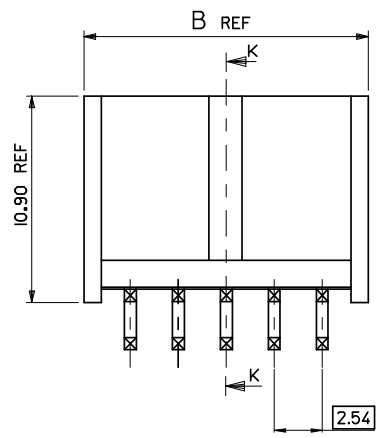
Packaging Specification	PK-91814-005
Product Specification	PS-99020-0001
Sales Drawing	SD-91814-001

This document was generated on 05/26/2010

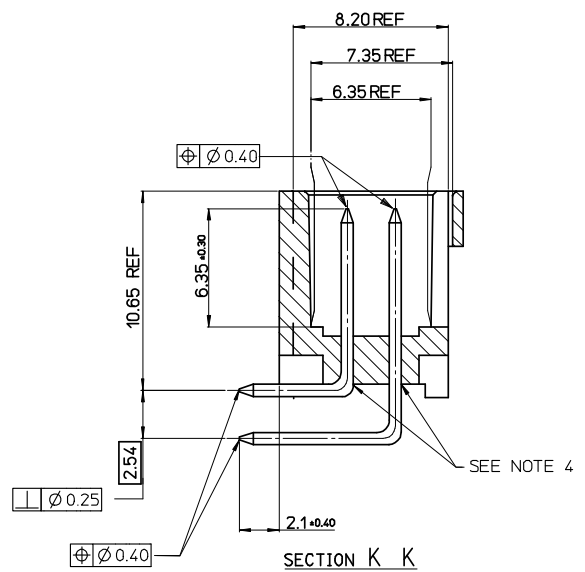
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**VERSION FULLY LOADED**



RECOMENDEC P.C. BOARD HOLE PATTERN



HSG CKT SIZE	PART NUMBER	DIM A	DIM B
6	91814-3106	5.08	9.96
8	91814-3108	7.62	12.50
10	91814-3110	10.16	15.04
12	91814-3112	12.70	17.58
14	91814-3114	15.24	20.12
16	91814-3116	17.78	22.66
18	91814-3118	20.32	25.20
20	91814-3120	22.86	27.74
22	91814-3122	25.40	30.28
24	91814-3124	27.94	32.82
26	91814-3126	30.48	35.36
28	91814-3128	33.02	37.90
30	91814-3130	35.56	40.44
32	91814-3132	38.10	42.98
34	91814-3134	40.64	45.52
36	91814-3136	43.18	48.06
38	91814-3138	45.72	50.60
40	91814-3140	48.26	53.14
42	91814-3142	50.80	55.68
44	91814-3144	53.34	58.22
46	91814-3146	55.88	60.76
48	91814-3148	58.42	63.30
50	91814-3150	60.96	65.84

**NOTES:**

- MATERIAL:  
PIN: 0.647 REF SQ. BRASS WIRE.  
HOUSING: (PCT) 30% GLASS FILLED POLYESTER UL 94 V-0  
COLOUR: BLACK
- PLATING:  
TIN 3.0µm MIN. OVER NICKEL.
- PIN RETENTION FORCE 20N MIN. IN BOTH DIRECTIONS.
- HOUSING FLASH PERMISSIBLE IN THIS AREA.
- PRODUCT SPECIFICATION: PS-99020-0001
- PCB THICKNESS 1.6MM

MODIFIED PIN DIM ADDED REF. DIMS EC NO: E2008-0144 DRWN:BYRNES 2008/04/10 CHKD: DWALLACE 2008/04/11 APPR: JWALLACE 2008/04/11	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION															
	$\nabla=0$ $\nabla=0$	<table border="1"> <tr><th colspan="2">mm</th><th>INCH</th></tr> <tr><td>4 PLACES</td><td>± ---</td><td>± ---</td></tr> <tr><td>3 PLACES</td><td>± ---</td><td>± ---</td></tr> <tr><td>2 PLACES</td><td>± 0.15</td><td>± ---</td></tr> <tr><td>1 PLACE</td><td>± 0.25</td><td>± ---</td></tr> </table>	mm		INCH	4 PLACES	± ---	± ---	3 PLACES	± ---	± ---	2 PLACES	± 0.15	± ---	1 PLACE	± 0.25	± ---	MM ONLY	5:1	METRIC	
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DESCRIPTION	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	<table border="1"> <tr><td>DRAWN BY</td><td>DATE</td></tr> <tr><td>DWASZKIEWICZ</td><td>2006/06/15</td></tr> <tr><td>CHECKED BY</td><td>DATE</td></tr> <tr><td>J DENNEHY</td><td>2006/09/29</td></tr> <tr><td>APPROVED BY</td><td>DATE</td></tr> <tr><td>J DENNEHY</td><td>2006/09/29</td></tr> </table>	DRAWN BY	DATE	DWASZKIEWICZ	2006/06/15	CHECKED BY	DATE	J DENNEHY	2006/09/29	APPROVED BY	DATE	J DENNEHY	2006/09/29	TITLE <b>C-GRID III DUAL ROW R/A PIN SHROUDED HEADER ROHS COMPATIBLE</b>						
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			SEE CHART	SD-91814-001	1 OF 1																
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