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Part Number: [0015445142](#)
Status: **Active**
Overview: [cgrid_sl_products](#)
Description: 2.54mm (.100") Pitch C-Grid® Receptacle, Through Hole, Dual Row, High Profile, Vertical, High-Temperature, 42 Circuits

Documents:

3D Model	Product Specification PS-70181 (PDF)
Packaging Specification (PDF)	RoHS Certificate of Compliance (PDF)
Drawing (PDF)	

Agency Certification

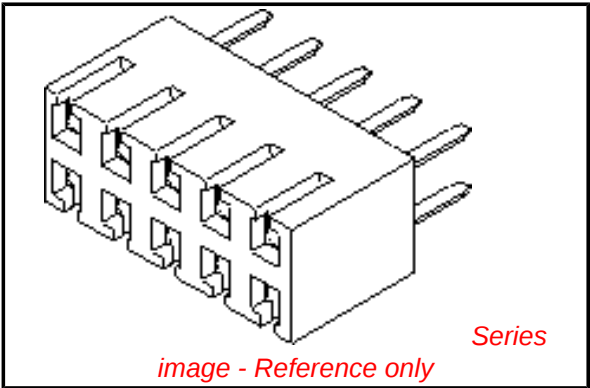
CSA	LR19980
UL	E29179

General

Product Family	PCB Receptacles
Series	71850
Application	Board-to-Board
Overview	cgrid_sl_products
Product Name	C-Grid®

Physical

Circuits (Loaded)	42
Circuits (maximum)	42
Color - Resin	Black
Durability (mating cycles max)	50
Flammability	94V-0
Glow-Wire Compliant	No
Guide to Mating Part	No
Keying to Mating Part	None
Lock to Mating Part	No
Material - Metal	Phosphor Bronze
Material - Plating Mating	Gold
Material - Plating Termination	Tin
Material - Resin	High Temperature Thermoplastic
Number of Rows	2
Orientation	Vertical
PC Tail Length (in)	0.120 In
PC Tail Length (mm)	3.05 mm
PCB Locator	No
PCB Retention	None
PCB Thickness Recommended (in)	0.054 In, 0.071 In
PCB Thickness Recommended (mm)	1.37 mm, 1.80 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)	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
Stackable	No



EU RoHS ELV and RoHS Compliant REACH SVHC Contains SVHC: No Halogen-Free Status Not Reviewed	China RoHS
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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
[71850Series](#)

Mates With
[8624](#) , [70203](#) , [70246](#) Straight Header, [70247](#) Right Angle Header, [70287](#) , [70289](#) , [70227](#) , [70567](#) , [70280](#) , [70524](#) , [70260](#) , [8723](#) , [70568](#) , [8724](#) , [71764](#) , [70229](#) , [70216](#) , [71308](#)

Surface Mount Compatible (SMC)	Yes
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	500V AC (RMS)

Solder Process Data

Duration at Max. Process Temperature (seconds)	40
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	260

Material Info

Old Part Number	71850-0212
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Reference - Drawing Numbers

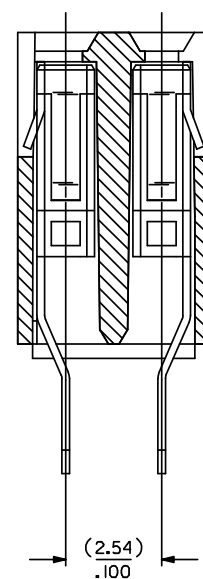
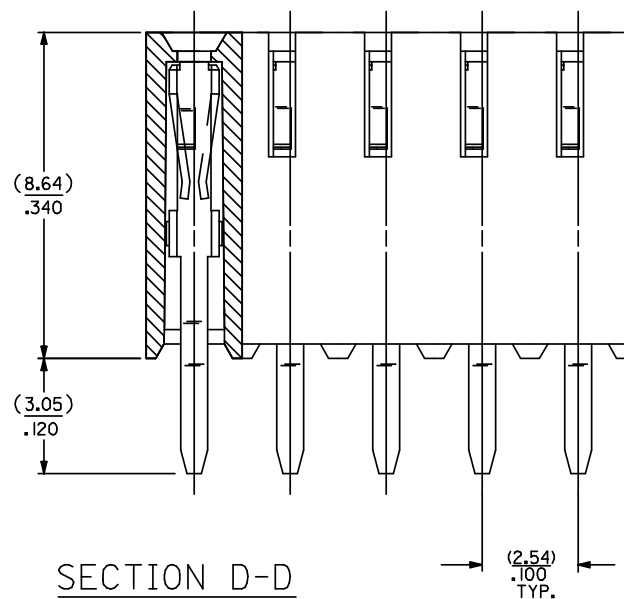
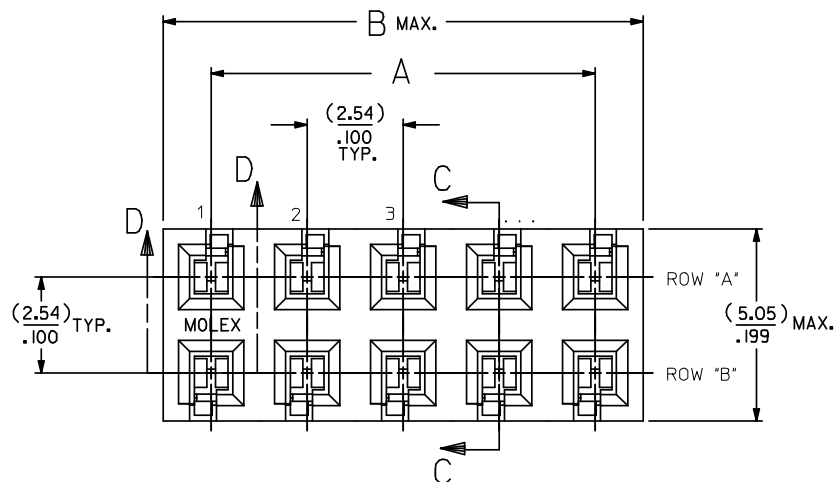
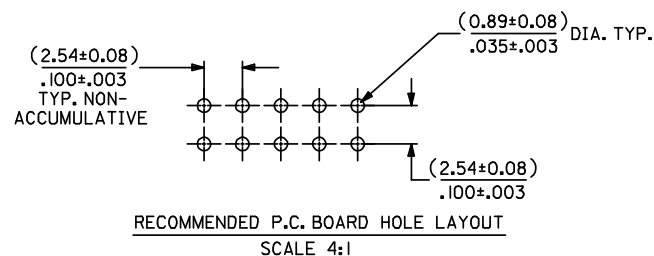
Packaging Specification	PK-70873-0660
Product Specification	PS-70181
Sales Drawing	SDA-71850-0***

This document was generated on 05/31/2010

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NOTES:

1. HOUSING MATERIAL: GLASS FILLED LIQUID CRYSTAL POLYMER, UL 94V-0, COLOR: BLACK.
TERMINAL MATERIAL: PHOSPHOR BRONZE
2. FINISHES: SEE CHART SHEET 2.
3. REFER TO PRODUCT SPECIFICATION PS-70181.
4. PACKAGING IN TRAYS PER PK-70873-0660.
5. SEE SHEET 2 FOR CIRCUIT SIZES AND OVERALL DIMENSIONS.
6. RECOMMENDED PCB THICKNESS (1.37-1.80)/.054-.071.
7. PART COMPLIES WITH CLASS C REQUIREMENTS OF COSMETIC SPECIFICATION PS-45499-002.



REMOVE 71850-0232 EC NO: UCP2009-0115 DRAWING: GAVILL 2008/07/22 CHKD: HK/PPR 2008/07/25 APPR: FSM/TH 2008/07/28	DESCRIPTION	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE	DESIGN UNITS INCH	 THIRD ANGLE PROJECTION				
				mm	INCH	DRAWN BY SKL	DATE 1988/02/29	SALES VERTICAL MOUNT DUAL ROW HIGH TEMP .100 X .100 PC GRID MOLEX INCORPORATED					
			4 PLACES ± ---	± ---	CHECKED BY	DATE							
			3 PLACES ± ---	± .005	MJM	1988/02/29							
			2 PLACES ± 0.13	± .010	APPROVED BY	DATE							
			1 PLACE ± 0.25	± ---	WAZ	1988/02/29	 MOLEX INCORPORATED	DOCUMENT NO. SDA-71850-0***					
			ANGULAR ±1/2°		MATERIAL NO.		SHEET NO. 1 OF 2						
			DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		SEE TABLE								
			REV E2			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	7	6	5	4	3	2	1				
J		J																
		CKT. SIZE		TERMINAL: 70172-0004 PLATING: TIN			TERMINAL: 70172-0006 PLATING: 15 GOLD			TERMINAL: 70172-0008 PLATING: 30 GOLD			DIM."A"		DIM."B"			
		PER ROW	TOTAL	EDP NO	ENG NO	RELEASED FOR MANUFACTURING	EDP NO	ENG NO	RELEASED FOR MANUFACTURING	EDP NO	ENG NO	RELEASED FOR MANUFACTURING	MM	INCH	MM	INCH	MM	INCH
		2	4	15-44-6804	A-71850-0065		15-44-5804	A-71850-0129		15-44-5104	A-71850-0193		2,54	.100	5,05	.199		
		3	6	15-44-6806	A-71850-0066		15-44-5806	A-71850-0130		15-44-5106	A-71850-0194		5,08	.200	7,59	.299		
		4	8	15-44-6808	A-71850-0067		15-44-5808	A-71850-0131		15-44-5108	A-71850-0195		7,62	.300	10,13	.399		
		5	10	15-44-6810	A-71850-0068		15-44-5810	A-71850-0132		15-44-5110	A-71850-0196		10,16	.400	12,67	.499		
I		6	12	15-44-6812	A-71850-0069		15-44-5812	A-71850-0133		15-44-5112	A-71850-0197		12,70	.500	15,21	.599		
		7	14	15-44-6814	A-71850-0070		15-44-5814	A-71850-0134		15-44-5114	A-71850-0198		15,24	.600	17,75	.699		
		8	16	15-44-6816	A-71850-0071		15-44-5816	A-71850-0135		15-44-5116	A-71850-0199		17,78	.700	20,29	.799		
		9	18	15-44-6818	A-71850-0072		15-44-5818	A-71850-0136		15-44-5118	A-71850-0200		20,32	.800	22,83	.899		
		10	20	15-44-6820	A-71850-0073		15-44-5820	A-71850-0137		15-44-5120	A-71850-0201		22,86	.900	25,37	.999		
		11	22	15-44-6822	A-71850-0074		15-44-5822	A-71850-0138		15-44-5122	A-71850-0202		25,40	1,000	27,91	1,099		
H		12	24	15-44-6824	A-71850-0075		15-44-5824	A-71850-0139		15-44-5124	A-71850-0203		27,94	1,100	30,45	1,199		
		13	26	15-44-6826	A-71850-0076		15-44-5826	A-71850-0140		15-44-5126	A-71850-0204		30,48	1,200	32,99	1,299		
		14	28	15-44-6828	A-71850-0077		15-44-5828	A-71850-0141		15-44-5128	A-71850-0205		33,02	1,300	35,53	1,399		
		15	30	15-44-6830	A-71850-0078		15-44-5830	A-71850-0142		15-44-5130	A-71850-0206		35,56	1,400	38,07	1,499		
		16	32	15-44-6832	A-71850-0079		15-44-5832	A-71850-0143		15-44-5132	A-71850-0207		38,10	1,500	40,61	1,599		
		17	34	15-44-6834	A-71850-0080		15-44-5834	A-71850-0144		15-44-5134	A-71850-0208		40,64	1,600	43,15	1,699		
G		18	36	15-44-6836	A-71850-0081		15-44-5836	A-71850-0145		15-44-5136	A-71850-0209		43,18	1,700	45,69	1,799		
		19	38	15-44-6838	A-71850-0082		15-44-5838	A-71850-0146		15-44-5138	A-71850-0210		45,72	1,800	48,23	1,899		
		20	40	15-44-6840	A-71850-0083		15-44-5840	A-71850-0147		15-44-5140	A-71850-0211		48,26	1,900	50,77	1,999		
		21	42	15-44-6842	A-71850-0084		15-44-5842	A-71850-0148		15-44-5142	A-71850-0212		50,80	2,000	53,31	2,099		
		22	44	15-44-6844	A-71850-0085		15-44-5844	A-71850-0149		15-44-5144	A-71850-0213		53,34	2,100	55,85	2,199		
		23	46	15-44-6846	A-71850-0086		15-44-5846	A-71850-0150		15-44-5146	A-71850-0214		55,88	2,200	58,39	2,299		
		24	48	15-44-6848	A-71850-0087		15-44-5848	A-71850-0151		15-44-5148	A-71850-0215		58,42	2,300	60,93	2,399		
F		25	50	15-44-6850	A-71850-0088		15-44-5850	A-71850-0152		15-44-5150	A-71850-0216		60,96	2,400	63,47	2,499		
		26	52	15-44-6852	A-71850-0089		15-44-5852	A-71850-0153		15-44-5152	A-71850-0217		63,50	2,500	66,01	2,599		
		27	54	15-44-6854	A-71850-0090		15-44-5854	A-71850-0154		15-44-5154	A-71850-0218		66,04	2,600	68,55	2,699		
		28	56	15-44-6856	A-71850-0091		15-44-5856	A-71850-0155		15-44-5156	A-71850-0219		68,58	2,700	71,09	2,799		
		29	58	15-44-6858	A-71850-0092		15-44-5858	A-71850-0156		15-44-5158	A-71850-0220		71,12	2,800	73,63	2,899		
		30	60	15-44-6860	A-71850-0093		15-44-5860	A-71850-0157		15-44-5160	A-71850-0221		73,66	2,900	76,17	2,999		
E		31	62	15-44-6862	A-71850-0094		15-44-5862	A-71850-0158		15-44-5162	A-71850-0222		76,20	3,000	78,71	3,099		
		32	64	15-44-6864	A-71850-0095		15-44-5864	A-71850-0159		15-44-5164	A-71850-0223		78,74	3,100	81,25	3,199		
		33	66	15-44-6866	A-71850-0096		15-44-5866	A-71850-0160		15-44-5166	A-71850-0224		81,28	3,200	83,79	3,299		
		34	68	15-44-6868	A-71850-0097		15-44-5868	A-71850-0161		15-44-5168	A-71850-0225		83,82	3,300	86,33	3,399		
		35	70	15-44-6870	A-71850-0098		15-44-5870	A-71850-0162		15-44-5170	A-71850-0226		86,36	3,400	88,87	3,499		
		36	72	15-44-6872	A-71850-0099		15-44-5872	A-71850-0163		15-44-5172	A-71850-0227		88,90	3,500	91,41	3,599		
		37	74	15-44-6874	A-71850-0100		15-44-5874	A-71850-0164		15-44-5174	A-71850-0228		91,44	3,600	93,95	3,699		
D		38	76	15-44-6876	A-71850-0101		15-44-5876	A-71850-0165		15-44-5176	A-71850-0229		93,98	3,700	96,49	3,799		
		39	78	15-44-6878	A-71850-0102		15-44-5878	A-71850-0166		15-44-5178	A-71850-0230		96,52	3,800	99,03	3,899		
		40	80	15-44-6880	A-71850-0103		15-44-5880	A-71850-0167		15-44-5180	A-71850-0231		99,06	3,900	101,57	3,999		
C		C																
B		B																
		PLATING PER ES-88-*** TIN - (3.81 MICROMETERS)/150 MICROINCHES MINIMUM TIN OVERALL OVER NICKEL UNDERPLATE OVERALL. 15 GOLD - (0.38 MICROMETERS)/75 MICROINCHES MINIMUM GOLD PLATE IN SELECT AREA, (1.90 MICROMETERS)/75 MICROINCHES MINIMUM TIN IN SELECT AREA OVER NICKEL UNDERPLATE OVERALL. 30 GOLD - (0.76 MICROMETERS)/30 MICROINCHES MINIMUM GOLD PLATE IN SELECT AREA, (1.90 MICROMETERS)/75 MICROINCHES MINIMUM TIN IN SELECT AREA OVER NICKEL UNDERPLATE OVERALL.																
A		A																
		REMOVE 71850-0232 EC NO: UCP2009-0115 2008/07/22 DRAWING: GVERILL 2008/07/25 CHKD: HKJ 2008/07/28 APPR: FSM TH																
		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 MM/IN DRAWN BY DATE SKL 1988/02/29 CHECKED BY DATE MJM 1988/02/29 APPROVED BY DATE WAZ 1988/02/29 MATERIAL NO. SEE TABLE SIZE C THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION																
		SCALE 1:1 DESIGN UNITS INCH THIRD ANGLE PROJECTION TITLE SALES VERTICAL MOUNT DUAL ROW HIGH TEMP .100 X .100 PC GRID MOLEX MOLEX INCORPORATED DOCUMENT NO. SDA-71850-0*** SHEET NO. 2 OF 2																
		12	11	10	9	8	7	6	5	4	3	2	1					
		1b_frame_C_P_AM.T Rev. E 2006/04/15																