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Part Number: [0015445180](#)
Status: **Active**
Overview: [cgrid_sl_products](#)
Description: 2.54mm (.100") Pitch C-Grid® Receptacle, Through Hole, Dual Row, High Profile, Vertical, High-Temperature, 80 Circuits

Documents:

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

Agency Certification

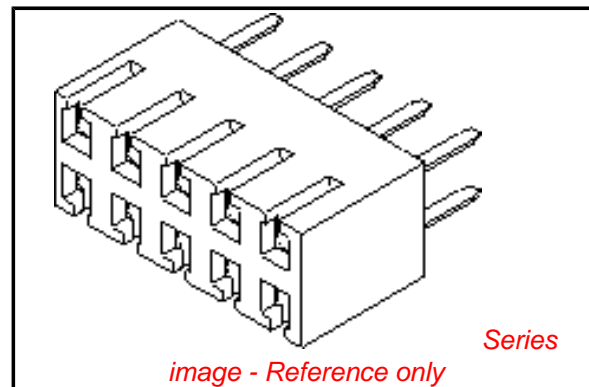
CSA LR19980
 UL E29179

General

Product Family PCB Receptacles
 Series [71850](#)
 Application Board-to-Board
 Overview [cgrid_sl_products](#)
 Product Name C-Grid®

Physical

Circuits (Loaded) 80
 Circuits (maximum) 80
 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



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 | 71850-0231 |
|-----------------|------------|

Reference - Drawing Numbers

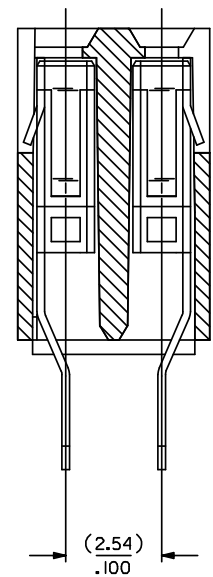
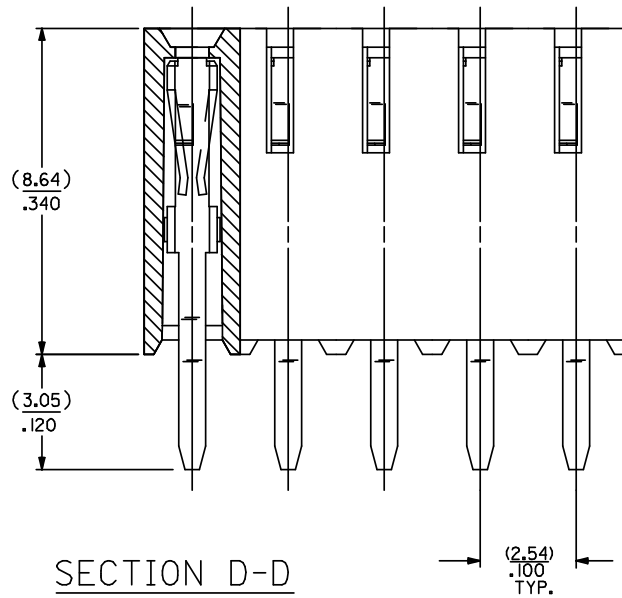
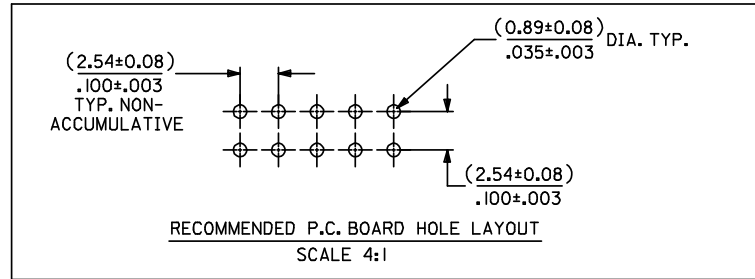
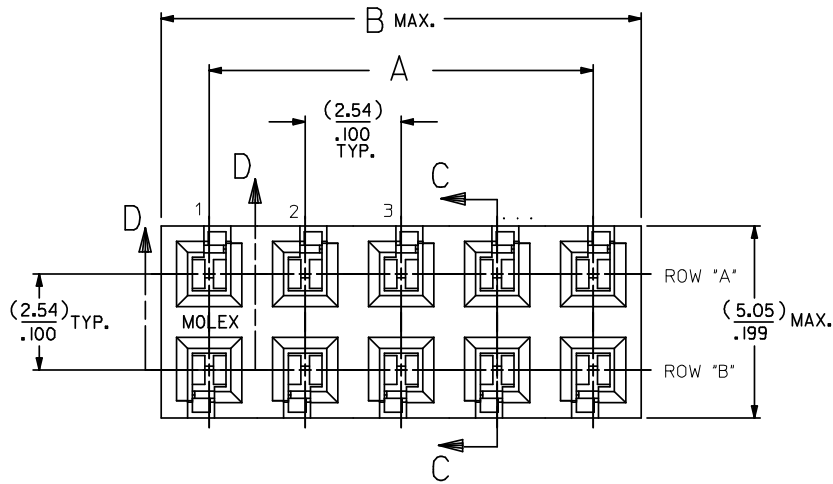
| | |
|-------------------------|----------------|
| Packaging Specification | PK-70873-0660 |
| Product Specification | PS-70181 |
| Sales Drawing | SDA-71850-0*** |

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.



SECTION C-C

| | | | | | | | | | | | | | | | | | | | | | |
|---|--|--|--------------------|---------------------------|--------------------------------|--|--------|--------|----------|--------|--------|----------|--------|--------|---------|--------|--------|--------------------------|---------------|----------------------|------------------------|
| REMOVE 71850-0232 EC NO: UCP2009-0115 DRAWING: GVERILL 2008/07/22 CHKD: HKIPPER 2008/07/25 APPR: FSM LTH 2008/07/28 | QUALITY SYMBOLS ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <td></td> <td>mm</td> <td>INCH</td> </tr> <tr> <td>4 PLACES</td> <td>± .---</td> <td>± .---</td> </tr> <tr> <td>3 PLACES</td> <td>± .---</td> <td>± .005</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.13</td> <td>± .010</td> </tr> <tr> <td>1 PLACE</td> <td>± 0.25</td> <td>± .---</td> </tr> </table> | | mm | INCH | 4 PLACES | ± .--- | ± .--- | 3 PLACES | ± .--- | ± .005 | 2 PLACES | ± 0.13 | ± .010 | 1 PLACE | ± 0.25 | ± .--- | DIMENSION STYLE MM/IN | SCALE INCH | DESIGN UNITS INCH | THIRD ANGLE PROJECTION |
| | | mm | INCH | | | | | | | | | | | | | | | | | | |
| | 4 PLACES | ± .--- | ± .--- | | | | | | | | | | | | | | | | | | |
| | 3 PLACES | ± .--- | ± .005 | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ± 0.13 | ± .010 | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ± 0.25 | ± .--- | | | | | | | | | | | | | | | | | | | |
| REV E2 | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | DRAWN BY SKL | DATE 1988/02/29 | CHECKED BY MJM | DATE 1988/02/29 | TITLE SALES VERTICAL MOUNT DUAL ROW HIGH TEMP .100 X .100 PC GRID | | | | | | | | | | | | | | | |
| | | APPROVED BY WAZ | DATE 1988/02/29 | MATERIAL NO. SEE TABLE | DOCUMENT NO. SDA-71850-0*** | SHEET NO. 1 OF 2 | | | | | | | | | | | | | | | |
| | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | | | | | | | | | | | | | | | |

| 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 | 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 |

PLATING PER ES-88-****
 TIN - (3.81 MICROMETERS)/150 MICROINCHES MINIMUM TIN OVERALL OVER NICKEL UNDERPLATE OVERALL.
 15 GOLD - (0.38 MICROMETERS)/15 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.

| | | | | | | |
|--|------------------------|--|-----------------|---|---|------------------------|
| REMOVE 71850-0232 EC NO: UCP2009-0115 DRAWINGVERTILL 2008/07/22 CHKD:HK/PPER 2008/07/25 APPR:FSM/LTH 2008/07/28 REV: E2 | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION |
| | ▽=0 | mm INCH | MM/IN | 1:1 | INCH | |
| | ▽=0 | 4 PLACES ± --- ± --- | DRAWN BY DATE | TITLE | SALES VERTICAL MOUNT DUAL ROW HIGH TEMP .100 X .100 PC GRID | |
| | | 3 PLACES ± --- ± .005 | SKL 1988/02/29 | SKL 1988/02/29 | MOLEX INCORPORATED | |
| | 2 PLACES ± 0.13 ± .010 | CHECKED BY DATE | MJM 1988/02/29 | SDA-71850-0*** | | |
| | 1 PLACE ± 0.25 ± --- | APPROVED BY DATE | WAZ 1988/02/29 | 2 OF 2 | | |
| | ANGULAR ± 1/2° | MATERIAL NO. | SEE TABLE | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | |