

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0015921440](#)
Status: **Active**
Description: 1.27mm (.050") Pitch EBBI™ 50D Receptacle, Vertical, 40 Circuits

Documents:

[3D Model](#) [Product Specification PS-71660 \(PDF\)](#)
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

Agency Certification

CSA LR19980
 UL E29179

General

Product Family PCB Receptacles
 Series 71660
 Application Board-to-Board
 Application Tooling Part Link 622004600
 Application Tooling Part Link 622005500
 Product Name EBBI™

Physical

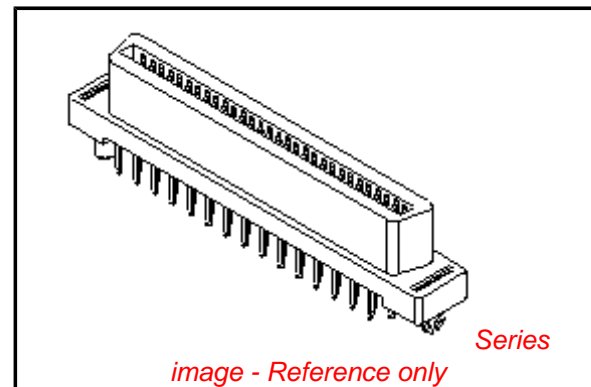
Circuits (Loaded) 40
 Color - Resin Black
 Durability (mating cycles max) 2,000
 Flammability 94V-0
 Glow-Wire Compliant No
 Guide to Mating Part Yes
 Material - Metal Phosphor Bronze
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin High Temperature Thermoplastic
 Number of Rows 2
 Orientation Vertical
 PC Tail Length (in) 0.110 In
 PC Tail Length (mm) 2.79 mm
 PCB Locator Yes
 PCB Retention Yes
 PCB Thickness Recommended (in) 0.062 In
 PCB Thickness Recommended (mm) 1.60 mm
 Packaging Type Tray
 Pitch - Mating Interface (in) 0.050 In
 Pitch - Mating Interface (mm) 1.27 mm
 Plating min: Mating (µin) 30
 Plating min: Mating (µm) 0.75
 Plating min: Termination (µin) 10
 Plating min: Termination (µm) 0.25
 Polarized to PCB Yes
 Temperature Range - Operating -40°C to +105°C
 Termination Interface: Style Through Hole

Electrical

Current - Maximum per Contact 1A
 Voltage - Maximum 30V

Solder Process Data

Lead-free Process Capability SMC & Wave Capable (TH only)
 Process Temperature max. C 260



EU RoHS

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

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

71660Series

Mates With

71661

Application Tooling | FAQ

Tooling specifications and manuals are found by selecting the products below. Crimp Height Specifications are then contained in the Application Tooling Specification document.

Global

| Description | Product # |
|--------------------|----------------------------|
| IDT - Manual Press | 0622004600 |
| IDT - Manual Press | 0622005500 |

Material Info

Old Part Number

A716601340

Reference - Drawing Numbers

Product Specification

PS-71660

Sales Drawing

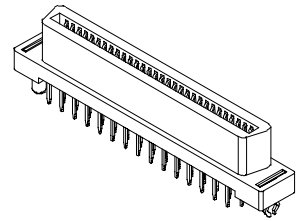
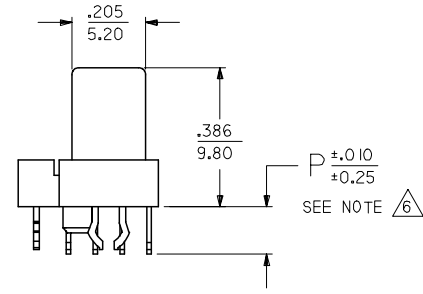
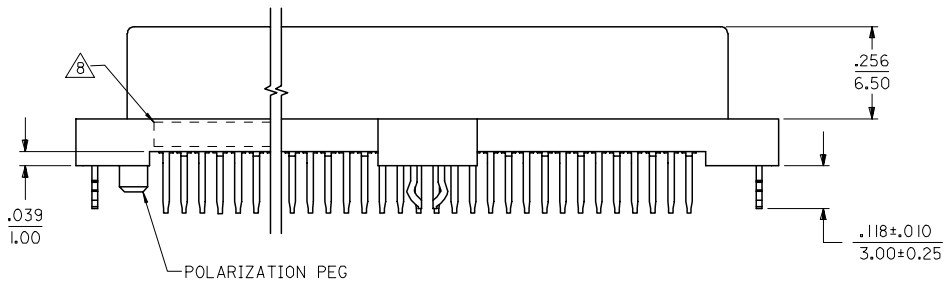
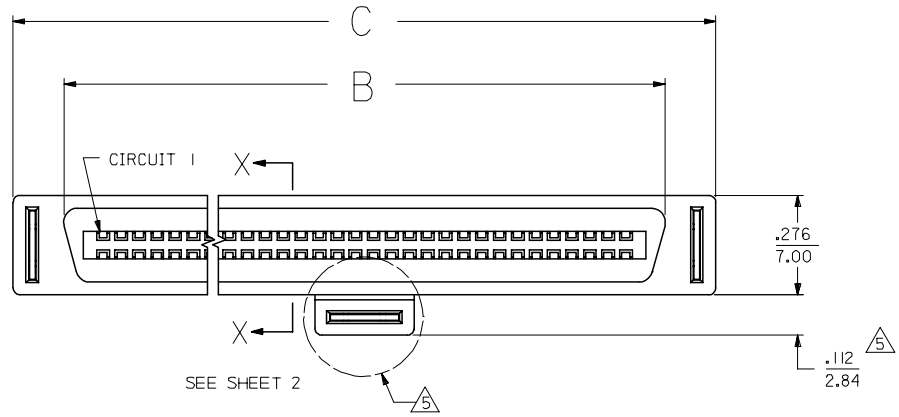
SDA-71660-1***, SDA-71660-1****

This document was generated on 04/14/2010

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NOTES:

- 1) MATERIALS:
HOUSING- LCP, GLASS FILLED, 94V-0, BLACK.
TERMINALS- COPPER ALLOY
METAL PEGS- COPPER ALLOY
- 2) FINISH:
TERMINALS:
.000030/(0.00076) MINIMUM GOLD IN CONTACT AREA OVER
.000050/(0.00127) MINIMUM TIN IN TAIL AREA OVER
.000075/(0.00191) MINIMUM NICKEL UNDERPLATE OVERALL.
- 3) ASSEMBLY MATES WITH MOLEX P/N SDA-71661-****.
- 4) CONFORMS TO PRODUCT SPECIFICATION PS-71660.
- 5) CENTER PEG IS ONLY ON I20 AND I30 CIRCUIT ASSEMBLIES.
- 6) TAIL LENGTH ON FIRST MATE CONTACTS IS APPROXIMATELY .010 INCH/0.25 MM SHORTER THAN THE TAIL LENGTH SPECIFIED.
- 7) CONNECTOR WILL ACCEPT MATING TO A P.C. BOARD WITH A THICKNESS OF .062±.003.
- 8) FOUR DIGIT DATE CODE (WK YR), EXAMPLE => 26 96 LOCATED IN AREA INDICATED.
- 9) SEE CHART FOR PACKAGING INFORMATION.



60 CIRCUIT ASSEMBLY SHOWN
SCALE 2:1

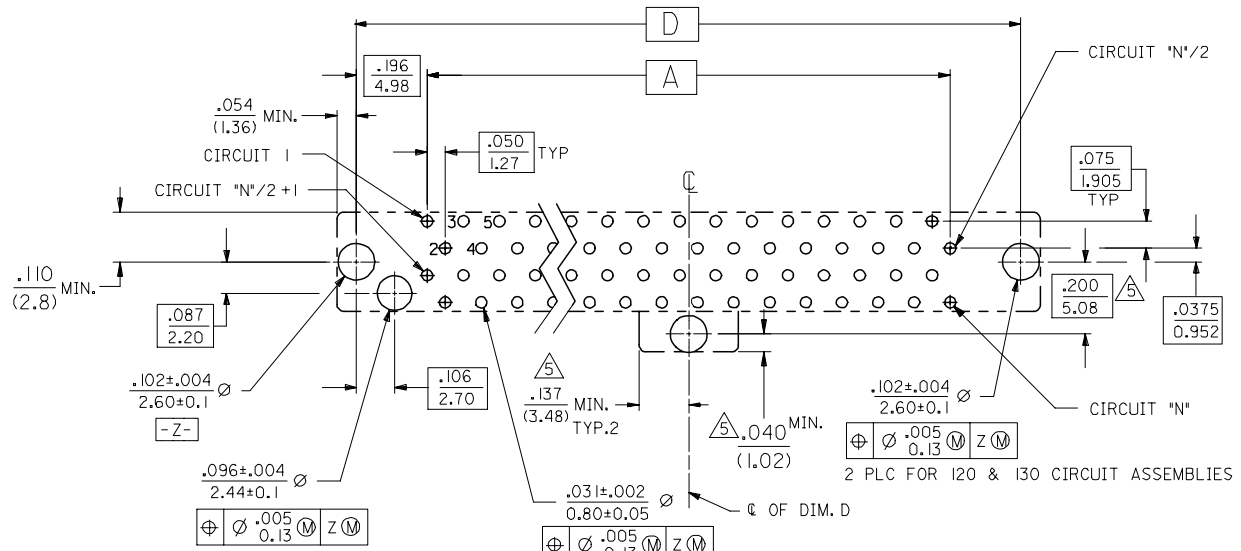
| | |
|-----|-----|
| 3 | 0 |
| 2 | 0 |
| 1 | 0 |
| SHT | REV |

| UPDATE BORDER FC NO: UCP2007-0935 DRAWN BY: BARKER 2006/11/06 CHKD: MIBARRA 2006/11/06 APPR: SMILLER 2006/11/07 | QUALITY SYMBOLS ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE IN/MM | | SCALE 4:1 | DESIGN UNITS INCH | THIRD ANGLE PROJECTION | | | | | | | | | | | | | | | | | |
|---|-------------------------------|---|-------|--------------------------|--------------------|--------------|----------------------|------------------------|--------|----------|-------|--------|----------|-------|--------|---------|-------|--------|-----------------|--|-----------------|--|--|--|--|
| | | <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>±.005</td> <td>±.0005</td> </tr> <tr> <td>3 PLACES</td> <td>±.010</td> <td>±.0010</td> </tr> <tr> <td>2 PLACES</td> <td>±.015</td> <td>±.0015</td> </tr> <tr> <td>1 PLACE</td> <td>±.025</td> <td>±.0025</td> </tr> </table> | | | mm | INCH | 4 PLACES | ±.005 | ±.0005 | 3 PLACES | ±.010 | ±.0010 | 2 PLACES | ±.015 | ±.0015 | 1 PLACE | ±.025 | ±.0025 | DRAWN BY RAN | | DATE 6/15/92 | TITLE SALES ASSEMBLY MOLEX EBBI 50D VERTICAL RECEPTACLE CONNECTOR | | | |
| | | | mm | INCH | | | | | | | | | | | | | | | | | | | | | |
| | | 4 PLACES | ±.005 | ±.0005 | | | | | | | | | | | | | | | | | | | | | |
| 3 PLACES | ±.010 | ±.0010 | | | | | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ±.015 | ±.0015 | | | | | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ±.025 | ±.0025 | | | | | | | | | | | | | | | | | | | | | | | |
| ANGULAR ±1/2° | | CHECKED BY RAN | | DATE 6/15/92 | APPROVED BY CAB | | | | | | | | | | | | | | | | | | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | MATERIAL NO. | | DATE 6/15/92 | | DOCUMENT NO. | | SHEET NO. 1 OF 3 | | | | | | | | | | | | | | | | | |

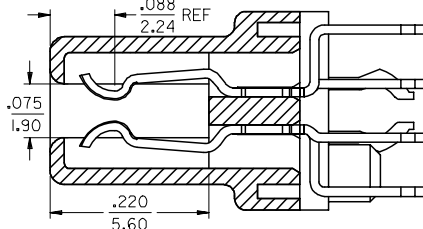
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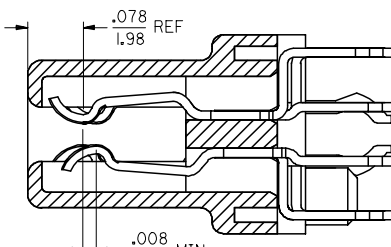
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(FOR 40, 60, 68, 80, 100, 120 CIRCUITS ONLY)



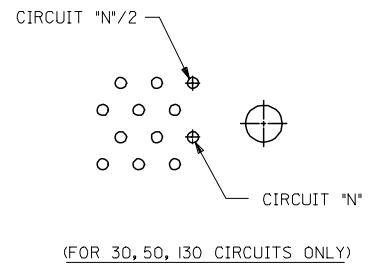
STANDARD PRODUCT



FMLB OPTION

SECTION X-X
SCALE - 8:1

RECOMMENDED PC BOARD LAYOUT
COMPONENT SIDE



| | | | | | | | | | |
|---|-------------------------------|---------------------------------------|-----------------------|--|-----------------|--|--------------------------------|------------------------|--|
| UPDATE BORDER FC NO: UCP2007-0935 DRWN: BARKER 2006/11/06 CHKD: MIBARRA 2006/11/06 APPR: SMILLER 2006/11/07 | QUALITY SYMBOLS ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE IN/MM | | SCALE 4:1 | DESIGN UNITS INCH | THIRD ANGLE PROJECTION | |
| | | 4 PLACES ± --- ± --- | 3 PLACES ± --- ± .005 | DRAWN BY RAN | DATE 6/15/92 | TITLE SALES ASSEMBLY MOLEX EBBI 50D VERTICAL RECEPTACLE | | | |
| | | 2 PLACES ± 0.13 ± .010 | 1 PLACE ± 0.25 ± --- | CHECKED BY RAN | DATE 6/15/92 | MOLEX INCORPORATED | | | |
| | | ANGULAR ±1/2° | | APPROVED BY CAB | DATE 6/15/92 | MATERIAL NO. SEE CHART | DOCUMENT NO. SDA-71660-1*** | SHEET NO. 2 OF 3 | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | | | |

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| ENGINEERING NUMBER | EDP NUMBER | PACKAGING SPEC | CKT (*N*) | A | B | C | D | P | ADVANCED TERMINALS / CKTS SEE SECTION X-X *FMLB OPT* |
|--------------------|-------------|----------------|-----------|---------------|---------------|---------------|---------------|-------------|--|
| SDA-71660-1030 | 015-92-1030 | PK-71660 | 30 | .700 (17.78) | .918 (23.32) | 1.199 (30.45) | 1.092 (27.75) | .134 (3.40) | N/A |
| SDA-71660-1040 | 015-92-1040 | PK-71660 | 40 | .950 (24.13) | 1.168 (29.67) | 1.449 (36.80) | 1.342 (34.10) | | |
| SDA-71660-1050 | 015-92-1050 | PK-71660 | 50 | 1.200 (30.48) | 1.418 (36.02) | 1.699 (43.15) | 1.592 (40.45) | | |
| SDA-71660-1060 | 015-92-1060 | PK-71660 | 60 | 1.450 (36.83) | 1.668 (42.37) | 1.949 (49.50) | 1.842 (46.80) | | |
| SDA-71660-1068 | 015-92-1068 | PK-71660 | 68 | 1.650 (41.91) | 1.868 (47.45) | 2.149 (54.58) | 2.042 (51.88) | | |
| SDA-71660-1080 | 015-92-1080 | PK-71660 | 80 | 1.950 (49.53) | 2.168 (55.07) | 2.449 (62.20) | 2.342 (59.50) | | |
| SDA-71660-1100 | 015-92-1100 | PK-71660 | 100 | 2.450 (62.23) | 2.668 (67.77) | 2.949 (74.90) | 2.842 (72.20) | | |
| SDA-71660-1120 | 015-92-1120 | PK-71660 | 120 | 2.950 (74.93) | 3.168 (80.47) | 3.449 (87.60) | 3.342 (84.90) | | |
| SDA-71660-1130 | 015-92-1130 | PK-71660 | 130 | 3.200 (81.28) | 3.418 (86.82) | 3.699 (93.95) | 3.592 (91.25) | .110 (2.79) | N/A |
| SDA-71660-1330 | 015-92-1430 | PK-71660 | 30 | .700 (17.78) | .918 (23.32) | 1.199 (30.45) | 1.092 (27.75) | | |
| SDA-71660-1340 | 015-92-1440 | PK-71660 | 40 | .950 (24.13) | 1.168 (29.67) | 1.449 (36.80) | 1.342 (34.10) | | |
| SDA-71660-1350 | 015-92-1450 | PK-71660 | 50 | 1.200 (30.48) | 1.418 (36.02) | 1.699 (43.15) | 1.592 (40.45) | | |
| SDA-71660-1360 | 015-92-1460 | PK-71660 | 60 | 1.450 (36.83) | 1.668 (42.37) | 1.949 (49.50) | 1.842 (46.80) | | |
| SDA-71660-1368 | 015-92-1468 | PK-71660 | 68 | 1.650 (41.91) | 1.868 (47.45) | 2.149 (54.58) | 2.042 (51.88) | | |
| SDA-71660-1380 | 015-92-1480 | PK-71660 | 80 | 1.950 (49.53) | 2.168 (55.07) | 2.449 (62.20) | 2.342 (59.50) | | |
| SDA-71660-1400 | 015-92-1500 | PK-71660 | 100 | 2.450 (62.23) | 2.668 (67.77) | 2.949 (74.90) | 2.842 (72.20) | | |
| SDA-71660-1401 | 015-92-1501 | PK-70873-0816 | 100 | 2.450 (62.23) | 2.668 (67.77) | 2.949 (74.90) | 2.842 (72.20) | .134 (3.40) | 2-4, 8-11, 14, 17, 20, 23, 26-29, 31, 32, 34, 36, 39, 42, 45, 48, 49 |
| SDA-71660-1420 | 015-92-1520 | PK-71660 | 120 | 2.950 (74.93) | 3.168 (80.47) | 3.449 (87.60) | 3.342 (84.90) | | |
| SDA-71660-1430 | 015-92-1530 | PK-71660 | 130 | 3.200 (81.28) | 3.418 (86.82) | 3.699 (93.95) | 3.592 (91.25) | | |
| SDA-71660-1550 | 015-92-1550 | PK-71660 | 50 | 1.200 (30.48) | 1.418 (36.02) | 1.699 (43.15) | 1.592 (40.45) | .155 (3.94) | N/A |
| SDA-71660-1630 | 716601630 | PK-71660 | 30 | .700 (17.78) | .918 (23.32) | 1.199 (30.45) | 1.092 (27.75) | | |
| SDA-71660-1640 | 716601640 | PK-71660 | 40 | .950 (24.13) | 1.168 (29.67) | 1.449 (36.80) | 1.342 (34.10) | | |
| SDA-71660-1650 | 716601650 | PK-71660 | 50 | 1.200 (30.48) | 1.418 (36.02) | 1.699 (43.15) | 1.592 (40.45) | | |
| SDA-71660-1660 | 716601660 | PK-71660 | 60 | 1.450 (36.83) | 1.668 (42.37) | 1.949 (49.50) | 1.842 (46.80) | | |
| SDA-71660-1668 | 716601668 | PK-71660 | 68 | 1.650 (41.91) | 1.868 (47.45) | 2.149 (54.58) | 2.042 (51.88) | | |
| SDA-71660-1680 | 716601680 | PK-71660 | 80 | 1.950 (49.53) | 2.168 (55.07) | 2.449 (62.20) | 2.342 (59.50) | | |
| SDA-71660-1700 | 716601700 | PK-71660 | 100 | 2.450 (62.23) | 2.668 (67.77) | 2.949 (74.90) | 2.842 (72.20) | | |
| SDA-71660-1720 | 716601720 | PK-71660 | 120 | 2.950 (74.93) | 3.168 (80.47) | 3.449 (87.60) | 3.342 (84.90) | | |
| SDA-71660-1730 | 716601730 | PK-71660 | 130 | 3.200 (81.28) | 3.418 (86.82) | 3.699 (93.95) | 3.592 (91.25) | | |

| | | | | | | | |
|--|-----------------|--|-----------------|--|--------------|---|---------------------|
| UPDATE BORDER EC NO: UCP2007-0935 O DRAWN: BARKER 2006/11/06 CHKD: 2006/11/06 APPR: SMILLER 2006/11/07 REVISIONS DESCRIPTION | QUALITY SYMBOLS | GENERAL TOLERANCES (UNLESS SPECIFIED) | DIMENSION STYLE | SCALE | DESIGN UNITS | THIRD ANGLE PROJECTION | |
| | ▽=0 ▽=0 | mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .005 2 PLACES ± 0.13 ± .010 1 PLACE ± 0.25 ± --- ANGULAR ±1/2° | IN/MM | 4:1 | INCH | DRAWN BY DATE RAN 6/15/92 CHECKED BY DATE RAN 6/15/92 APPROVED BY DATE CAB 6/15/92 | |
| | | DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | SEE CHART | SALES ASSEMBLY MOLEX EBBI 50D VERTICAL RECEPTACLE | | MATERIAL NO. SDA-71660-1**** | SHEET NO. 3 OF 3 |
| | | | | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | | | |