

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0716607668](#)
Status: **Active**
Description: 1.27mm (.050") Pitch EBBI™ 50D Receptacle, Vertical, Blind-Mate, 68 Circuits

Documents:

[3D Model](#) [RoHS Certificate of Compliance \(PDF\)](#)
[Drawing \(PDF\)](#)

Agency Certification

CSA LR19980
 UL E29179

General

Product Family PCB Receptacles
 Series [71660](#)
 Application Board-to-Board
 Product Name EBBI™

Physical

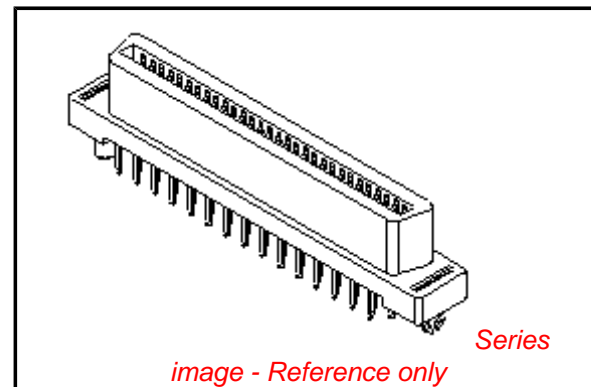
Circuits (Loaded) 68
 Color - Resin Black
 Durability (mating cycles max) 2,000
 Flammability 94V-0
 Glow-Wire Compliant No
 Guide to Mating Part Yes
 Lock to Mating Part None
 Material - Metal Phosphor Bronze
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin High Temperature Thermoplastic
 Number of Rows 2
 Orientation Vertical
 PC Tail Length (in) 0.155 In
 PC Tail Length (mm) 3.94 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
 Surface Mount Compatible (SMC) Yes
 Temperature Range - Operating -40°C to +105°C
 Termination Interface: Style Through Hole

Electrical

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

Material Info

Reference - Drawing Numbers



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
 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

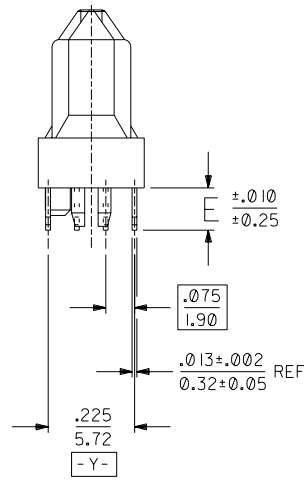
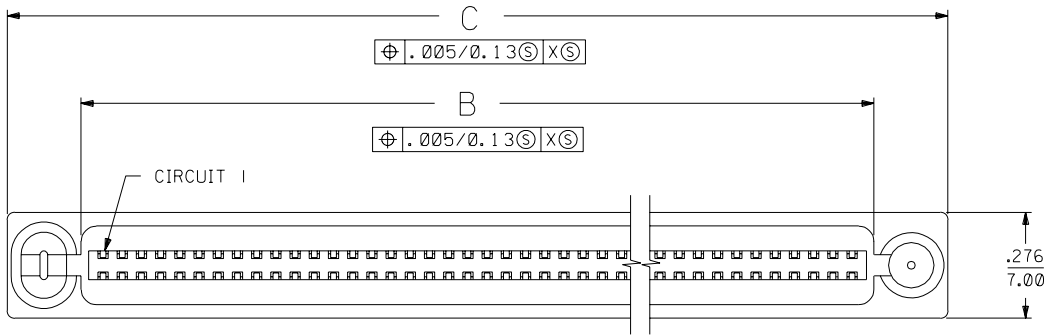
[71661](#)

This document was generated on 05/24/2010

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NOTES:

- 1) MATERIALS:
HOUSING- LCP, GLASS FILLED, 94V-0, BLACK.
TERMINALS- COPPER ALLOY
- 2) FINISH:
TERMINALS:
.000030/(0.00076) MINIMUM GOLD IN CONTACT AREA AND
.000050/(0.00127) MINIMUM TIN IN TAIL AREA OVER
.000075/(0.00191) MINIMUM NICKEL UNDERPLATE OVERALL.
- 3) ASSEMBLY MATES WITH MOLEX P/N SDA-71661-7***.
CONFORMS TO PRODUCT SPECIFICATION PS-71660.
- 4) RECOMMENDED P.C. BOARD THICKNESS IS .062/1.6 mm.
- 5) FOUR DIGIT DATE CODE TO BE LOCATED ON SURFACE AS SHOWN.



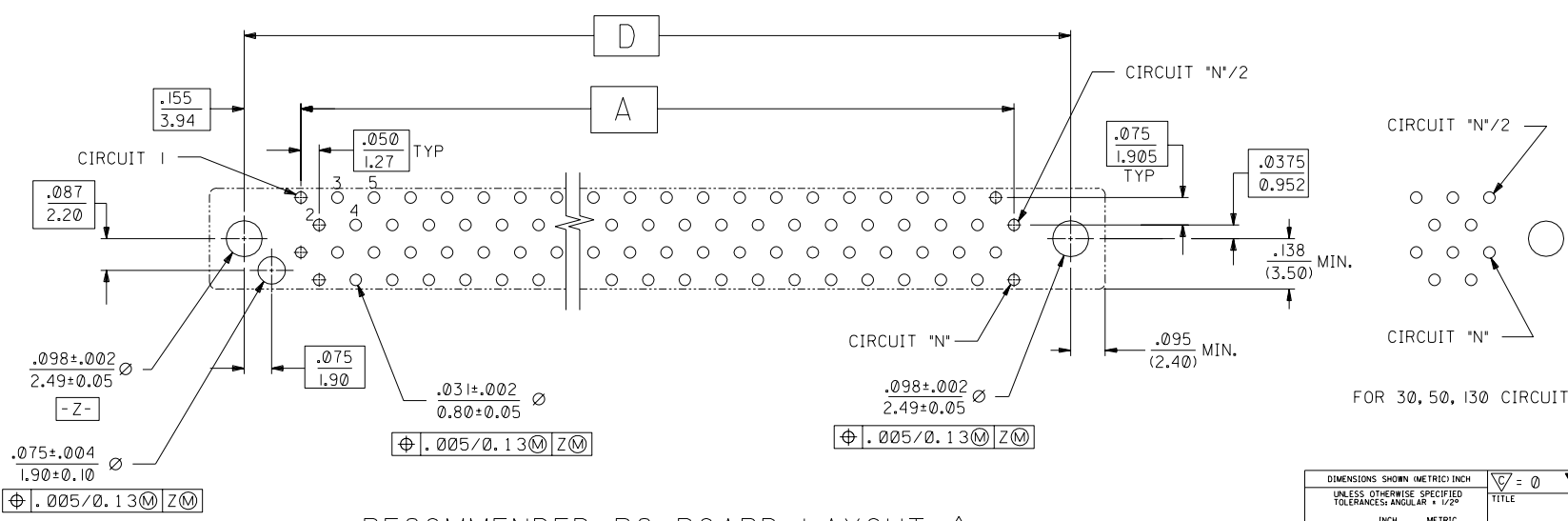
NOTE FOR LEAD FREE CONVERSION:
THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH LEAD.

| | |
|---|--|
| N | ADD LONG TAIL UCP2004-1302 RWWHITE 04/07/14 |
| M | LEAD FREE CONV ECN UCP2004-2096 RKADAMS 04/04/29 |
| L | REVISED PER UDT 2000-1231 ACHAMMER 00/06/07 |
| K | REVISED PER ECN U71314 ACHAMMER 97/4/25 |
| J | REVISED PER ECN U70133 ACHAMMER 96/8/19 |
| I | REVISED PER ECN U70090 ACHAMMER 96/7/26 |
| H | REVISED PER ECN U61278 5-2-96 DCA |
| G | REVISED PER ECN U60641 11-29-95 DRS |
| F | REVISED PER ECN U60564 11-8-95 RAN |
| E | REVISED PER ECN U50229 9-23-94 RAN |
| D | REVISED PER ECN U50090 8-30-94 RAN |
| C | REVISED PER ECN U40506 4-15-94 RAN |
| B | REVISED PER ECN U40305 3-4-94 RAN |
| A | INITIAL RELEASE PER ECN U31832 12-15-93 RAN |

| | | | |
|----------|------|------|-----------|
| 2 | N | | |
| 1 | N | | |
| MFG, SH. | REV. | LTR. | REVISIONS |

| DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR $\pm 1/2^\circ$ | | REVISIONS ONLY ON CAD SYSTEM | | | | | | | | | | | | | |
|--|----------------|------------------------------|--|--------|---------|------------|-----|---------|-----------|------------|---------|-----|-----------|--|--|
| <table border="1"> <tr> <th>PLACES</th> <th>INCH</th> <th>METRIC</th> </tr> <tr> <td>3 PLACE</td> <td>$\pm .005$</td> <td>---</td> </tr> <tr> <td>2 PLACE</td> <td>\pm ---</td> <td>± 0.13</td> </tr> <tr> <td>1 PLACE</td> <td>---</td> <td>\pm ---</td> </tr> </table> | | PLACES | INCH | METRIC | 3 PLACE | $\pm .005$ | --- | 2 PLACE | \pm --- | ± 0.13 | 1 PLACE | --- | \pm --- | TITLE: SALES ASSEMBLY EBBI 50D VERTICAL RCPT BLIND MATE CONNECTOR SHEET NO. 1 OF 2 DATE 11/17/93 U.S.A. MOLEX INCORPORATED LITSE, ILL. 60532 DRAWG. NO. SDA-71660-7*** DIV. C | |
| PLACES | INCH | METRIC | | | | | | | | | | | | | |
| 3 PLACE | $\pm .005$ | --- | | | | | | | | | | | | | |
| 2 PLACE | \pm --- | ± 0.13 | | | | | | | | | | | | | |
| 1 PLACE | --- | \pm --- | | | | | | | | | | | | | |
| DRWG. BY: RAN | CHK'D. BY: RAN | FILE NAME: 571660X7 | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. | | | | | | | | | | | | |
| APP'D. BY: CAB | SCALE: 4: 1 | | | | | | | | | | | | | | |

| ITEM NUMBER | CKT ('N') | A | B | C | D | E |
|-------------|-----------|---------------|---------------|---------------|---------------|-------------|
| 71660-7030 | 30 | .700 (17.78) | .815 (20.70) | 1.199 (30.45) | 1.010 (25.65) | .110 (2.79) |
| 71660-7040 | 40 | .950 (24.13) | 1.065 (27.05) | 1.449 (36.80) | 1.260 (32.00) | |
| 71660-7050 | 50 | 1.200 (30.48) | 1.315 (33.40) | 1.699 (43.15) | 1.510 (38.35) | |
| 71660-7060 | 60 | 1.450 (36.83) | 1.565 (39.75) | 1.949 (49.50) | 1.760 (44.70) | |
| 71660-7068 | 68 | 1.650 (41.91) | 1.765 (44.83) | 2.149 (54.58) | 1.960 (49.78) | |
| 71660-7080 | 80 | 1.950 (49.53) | 2.065 (52.45) | 2.449 (62.20) | 2.260 (57.40) | |
| 71660-7100 | 100 | 2.450 (62.23) | 2.565 (65.15) | 2.949 (74.90) | 2.760 (70.10) | |
| 71660-7120 | 120 | 2.950 (74.93) | 3.065 (77.85) | 3.449 (87.60) | 3.260 (82.80) | |
| 71660-7130 | 130 | 3.200 (81.28) | 3.315 (84.20) | 3.699 (93.95) | 3.510 (89.15) | |
| 71660-7230 | 30 | .700 (17.78) | .815 (20.70) | 1.199 (30.45) | 1.010 (25.65) | |
| 71660-7240 | 40 | .950 (24.13) | 1.065 (27.05) | 1.449 (36.80) | 1.260 (32.00) | |
| 71660-7250 | 50 | 1.200 (30.48) | 1.315 (33.40) | 1.699 (43.15) | 1.510 (38.35) | |
| 71660-7260 | 60 | 1.450 (36.83) | 1.565 (39.75) | 1.949 (49.50) | 1.760 (44.70) | |
| 71660-7268 | 68 | 1.650 (41.91) | 1.765 (44.83) | 2.149 (54.58) | 1.960 (49.78) | |
| 71660-7280 | 80 | 1.950 (49.53) | 2.065 (52.45) | 2.449 (62.20) | 2.260 (57.40) | |
| 71660-7300 | 100 | 2.450 (62.23) | 2.565 (65.15) | 2.949 (74.90) | 2.760 (70.10) | |
| 71660-7320 | 120 | 2.950 (74.93) | 3.065 (77.85) | 3.449 (87.60) | 3.260 (82.80) | |
| 71660-7330 | 130 | 3.200 (81.28) | 3.315 (84.20) | 3.699 (93.95) | 3.510 (89.15) | |
| 71660-7630 | 30 | .700 (17.78) | .815 (20.70) | 1.199 (30.45) | 1.010 (25.65) | .155 (3.94) |
| 71660-7640 | 40 | .950 (24.13) | 1.065 (27.05) | 1.449 (36.80) | 1.260 (32.00) | |
| 71660-7650 | 50 | 1.200 (30.48) | 1.315 (33.40) | 1.699 (43.15) | 1.510 (38.35) | |
| 71660-7660 | 60 | 1.450 (36.83) | 1.565 (39.75) | 1.949 (49.50) | 1.760 (44.70) | |
| 71660-7668 | 68 | 1.650 (41.91) | 1.765 (44.83) | 2.149 (54.58) | 1.960 (49.78) | |
| 71660-7680 | 80 | 1.950 (49.53) | 2.065 (52.45) | 2.449 (62.20) | 2.260 (57.40) | |
| 71660-7700 | 100 | 2.450 (62.23) | 2.565 (65.15) | 2.949 (74.90) | 2.760 (70.10) | |
| 71660-7720 | 120 | 2.950 (74.93) | 3.065 (77.85) | 3.449 (87.60) | 3.260 (82.80) | |
| 71660-7730 | 130 | 3.200 (81.28) | 3.315 (84.20) | 3.699 (93.95) | 3.510 (89.15) | |



RECOMMENDED PC BOARD LAYOUT Δ
 COMPONENT SIDE
 FOR 40, 60, 68, 80, 100, 120 CIRCUIT SIZES

| | |
|---|-------------|
| N | SEE SHEET I |
| K | SEE SHEET I |

| | | | | | |
|--|--------|--------------------------|-----|---|--|
| DIMENSIONS SHOWN (METRIC) INCH | | ▽ = 0 ▼ = 0 | | REVISE ONLY ON CAD SYSTEM | |
| UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2° | | | | | |
| 3 PLACE | ± .005 | --- | --- | | |
| 2 PLACE | ± --- | ± 0.13 | --- | | |
| 1 PLACE | --- | ± --- | --- | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | | |
| DRWG. BY: RAN | | CHK'D. BY: RAN | | SCALE: 4: 1 | |
| APP'D. BY: CAB | | FILE NAME: 571660BXT | | SHEET NO.: 2 | |
| | | DATE: 11/17/93 | | U.S.A. | |
| PART NO. SDA-71660-7*** | | DRWG. NO. SDA-71660-7*** | | TITLE: SALES ASSEMBLY EBBI 50D, VERTICAL RCPT, BLIND MATE CONNECTOR | |
| MFG. SH. REV. LTR. REVISIONS | | MOLEX INCORPORATED | | | |
| | | LITSE, ILL. 60532 | | | |
| THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION. | | | | | |