

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

**Part Number:** [0716612568](#)  
**Status:** **Active**  
**Overview:** [ebbi\\_50d](#)  
**Description:** 1.27mm (.050") Pitch EBBI™ 50D Plug, Right Angle, Blind-Mate, 68 Circuits, 2.79mm (.110") PC Tail Length

**Documents:**

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

**Agency Certification**

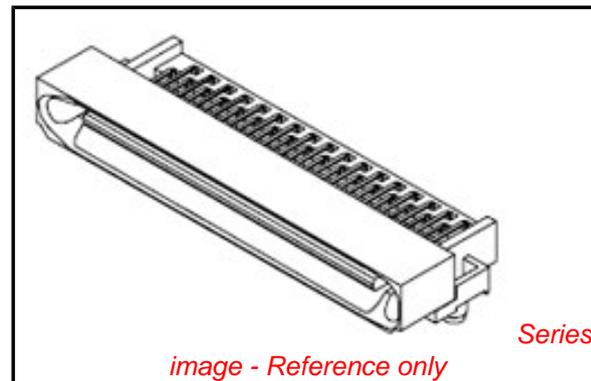
CSA LR19980  
 UL E29179

**General**

Product Family PCB Headers  
 Series [71661](#)  
 Application Board-to-Board, Wire-to-Board  
 Overview [ebbi\\_50d](#)  
 Product Name EBBI™

**Physical**

Breakaway No  
 Circuits (Loaded) 68  
 Circuits (maximum) 68  
 Color - Resin Black  
 Durability (mating cycles max) 2,000  
 First Mate / Last Break No  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Guide to Mating Part Yes  
 Keying to Mating Part None  
 Lock to Mating Part None  
 Material - Metal Brass  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 2  
 Orientation Right Angle  
 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  
 Pitch - Term. Interface (in) 0.050 In  
 Pitch - Term. Interface (mm) 1.27 mm  
 Plating min: Mating (µin) 30  
 Plating min: Mating (µm) 0.76  
 Plating min: Termination (µin) 50  
 Plating min: Termination (µm) 1.30  
 Polarized to Mating Part Yes  
 Polarized to PCB Yes



**EU RoHS**

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

**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**

71661Series

**Mates With**

EBBI™ 50D Receptacle [71660](#) , [87537](#)

|                                |                 |
|--------------------------------|-----------------|
| Shrouded                       | Fully           |
| Stackable                      | No              |
| Surface Mount Compatible (SMC) | No              |
| 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   | 235                          |

#### **Material Info**

#### **Reference - Drawing Numbers**

|                         |                |
|-------------------------|----------------|
| Packaging Specification | PK-70873-084*  |
| Product Specification   | PS-71660       |
| Sales Drawing           | SDA-71661-25** |

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NOTES:

1. MATERIAL:

HOUSING: LIQUID CRYSTAL POLYMER (LCP), GLASS-FILLED, UL94V-0,  
COLOR: BLACK

TERMINALS: BRASS

2. FINISH:

TERMINAL: 0.76 MICROMETERS/30 MICROINCHES MINIMUM SELECTIVE GOLD  
IN CONTACT AREA; 1.27 MICROMETERS/50 MICROINCHES MINIMUM  
SELECTIVE TIN IN THE PC TAIL AREA; NICKEL UNDERPLATE OVERALL.

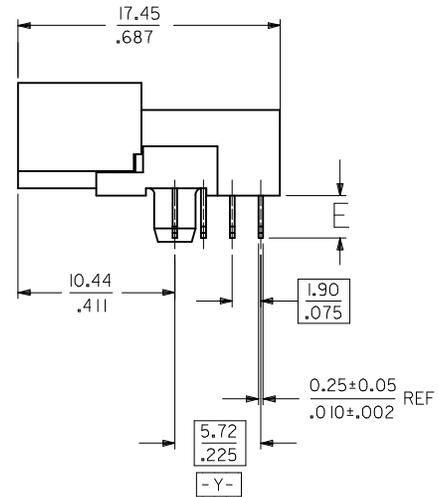
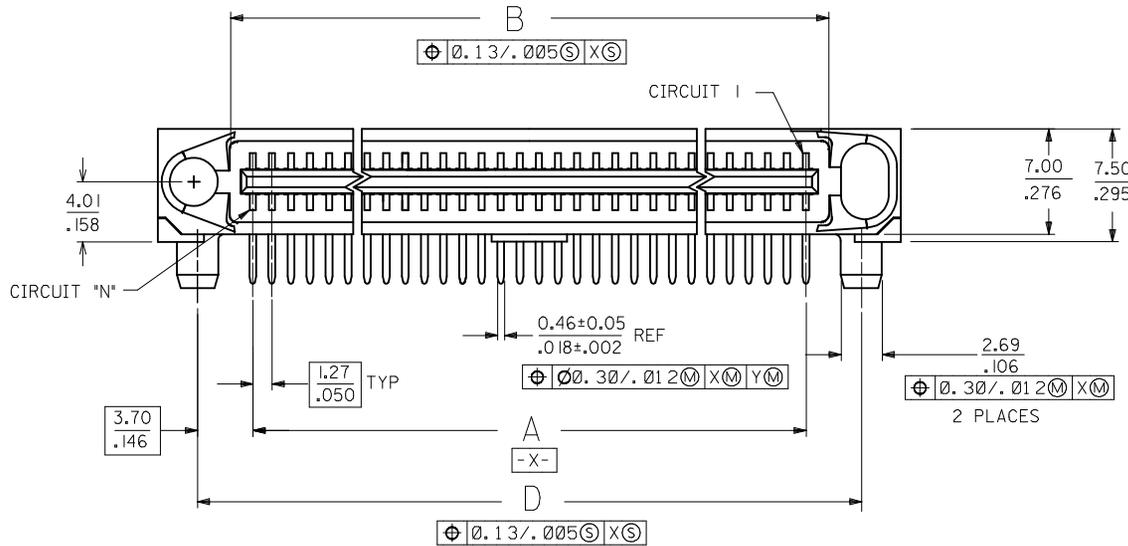
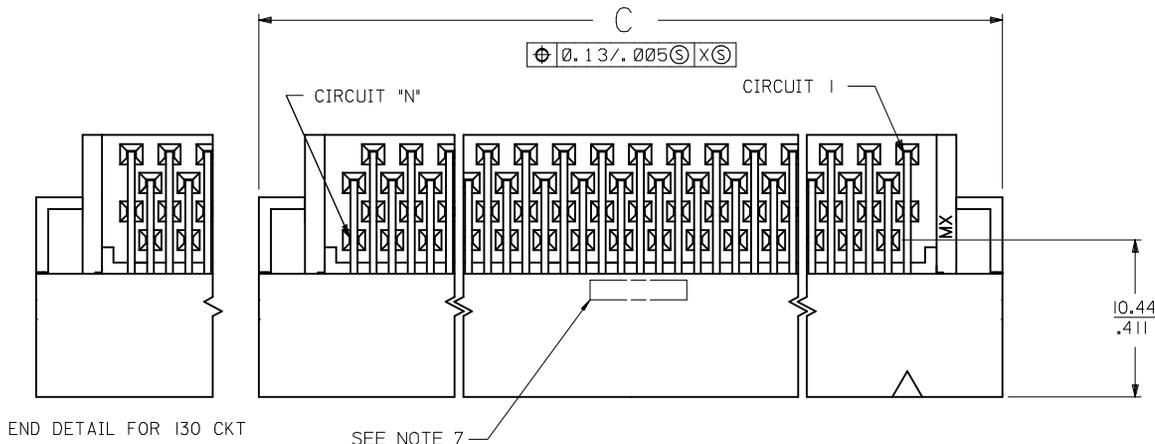
3. CONFORMS TO PRODUCT SPEC: PS-71660

4. PRODUCT PACKAGED PER PK-70873-084\*

5. ASSEMBLY MATES WITH MOLEX P/N SDA-71660-7\*\*\*

6. RECOMMENDED PC BOARD THICKNESS IS 1.6 MM/0.062 IN

7. FOUR DIGIT DATE CODE (WK.YR.) EXAMPLE 26 96 LOCATED IN AREA SHOWN



| <b>CHANGE MATERIAL</b><br>EC NO: UCP2009-1254<br>DRWN:MSIBARRA 2008/12/19<br>CHKD:BSMART 2009/01/06<br>APPR:SMILLER 2009/01/06 | QUALITY SYMBOLS<br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED)<br><table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± .01</td> <td>± .0004</td> </tr> <tr> <td>3 PLACES</td> <td>± .02</td> <td>± .0008</td> </tr> <tr> <td>2 PLACES</td> <td>± .05</td> <td>± .0020</td> </tr> <tr> <td>1 PLACE</td> <td>± .10</td> <td>± .0040</td> </tr> </table> |   | mm                 | INCH                | 4 PLACES                       | ± .01 | ± .0004 | 3 PLACES | ± .02 | ± .0008 | 2 PLACES | ± .05 | ± .0020 | 1 PLACE | ± .10 | ± .0040 | DIMENSION STYLE<br>MM/IN | SCALE<br>4:1 | DESIGN UNITS<br>INCH | THIRD ANGLE PROJECTION |
|--|-------------------------------|--|---|--------------------|---------------------|--------------------------------|-------|---------|----------|-------|---------|----------|-------|---------|---------|-------|---------|--------------------------|--------------|----------------------|------------------------|
|  |                               | mm   | INCH  |                    |                     |                                |       |         |          |       |         |          |       |         |         |       |         |                          |              |                      |                        |
|  | 4 PLACES                      | ± .01  | ± .0004   |                    |                     |                                |       |         |          |       |         |          |       |         |         |       |         |                          |              |                      |                        |
|  | 3 PLACES                      | ± .02  | ± .0008   |                    |                     |                                |       |         |          |       |         |          |       |         |         |       |         |                          |              |                      |                        |
| 2 PLACES   | ± .05                         | ± .0020  |   |                    |                     |                                |       |         |          |       |         |          |       |         |         |       |         |                          |              |                      |                        |
| 1 PLACE  | ± .10                         | ± .0040  |   |                    |                     |                                |       |         |          |       |         |          |       |         |         |       |         |                          |              |                      |                        |
| MATERIAL NO.<br>SEE TABLE  | DRAWN BY<br>RAN               | DATE<br>1995/04/26   | TITLE<br>SALES ASSMBLY<br>EBBI 50D RIGHT ANGLE<br>BLIND MATE PLUG   | MOLEX INCORPORATED | SHEET NO.<br>1 OF 2 | DOCUMENT NO.<br>SDA-71661-25** |       |         |          |       |         |          |       |         |         |       |         |                          |              |                      |                        |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS   | APPROVED BY<br>CAB            | DATE<br>1995/04/26   | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX.<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                    |                     |                                |       |         |          |       |         |          |       |         |         |       |         |                          |              |                      |                        |
| REV: K   | DESCRIPTION                   |  |   |                    |                     |                                |       |         |          |       |         |          |       |         |         |       |         |                          |              |                      |                        |

