

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0015922080](#)
Status: **Active**
Overview: [ebbi_50d](#)
Description: 1.27mm (.050") Pitch EBBI™ 50D Plug, Vertical, without Latch, 80 Circuits, 3.40mm (.134") PC Tail Length

Documents:

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

Agency Certification

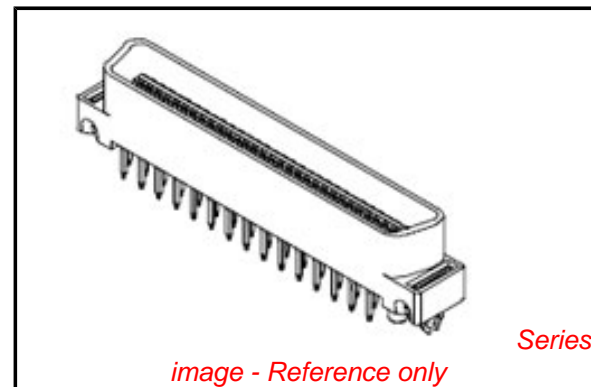
CSA LR19980
 UL E29179

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) 80
 Circuits (maximum) 80
 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 No
 Keying to Mating Part None
 Lock to Mating Part None
 Material - Metal Copper Alloy
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin High Temperature Thermoplastic
 Number of Rows 2
 Orientation Vertical
 PC Tail Length (in) 0.134 In
 PC Tail Length (mm) 3.40 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) 75
 Plating min: Termination (µm) 1.91
 Polarized to Mating Part Yes
 Polarized to PCB Yes



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

[71661Series](#)

Mates With

EBBI™ 50D Receptacle [71660](#) , [87552](#)

| | |
|--------------------------------|-----------------|
| 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 | 260 |

Material Info

| | |
|-----------------|--------------|
| Old Part Number | A-71661-1080 |
|-----------------|--------------|

Reference - Drawing Numbers

| | |
|-------------------------|----------------|
| Packaging Specification | PK-71660 |
| Sales Drawing | SDA-71661-1*** |

This document was generated on 05/26/2010

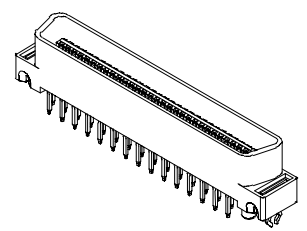
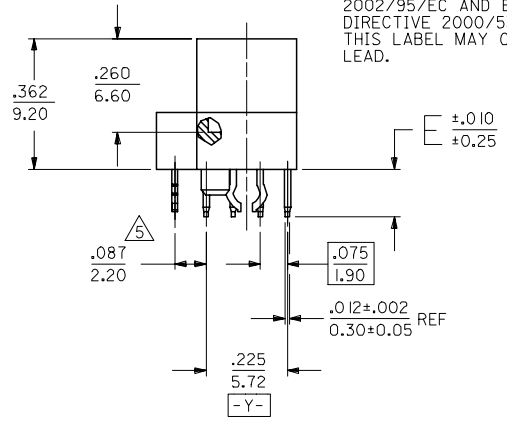
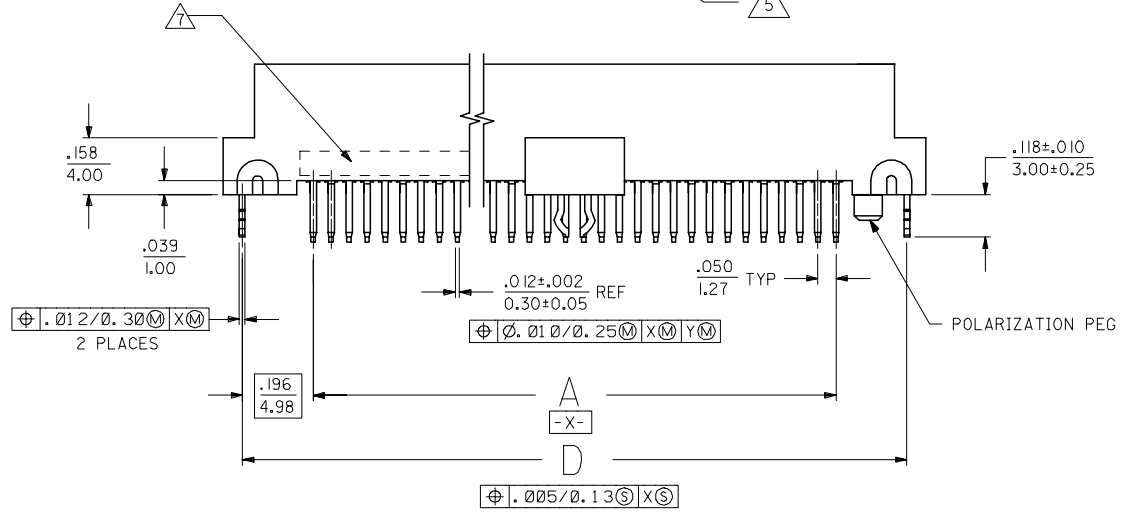
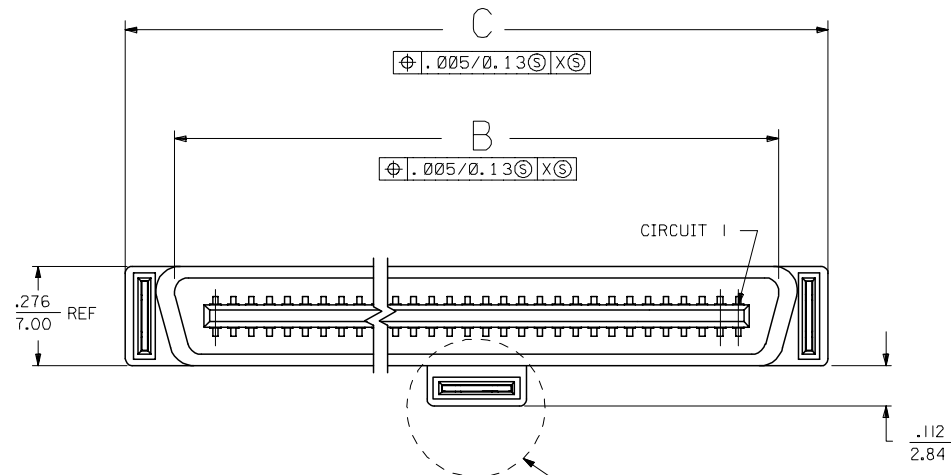
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NOTES:

- 1) MATERIALS:
HOUSING - LIQUID CRYSTAL POLYMER (LCP), GLASS FILLED, UL94V-0, COLOR: BLACK
TERMINALS - COPPPER ALLOY
METAL PEGS - COPPPER ALLOY
- 2) TERMINAL FINISH:
30 MICROINCH/0.76 MICROMETER MINIMUM GOLD IN CONTACT AREA AND 50 MICROINCH/1.27 MICROMETER MINIMUM TIN IN TAIL AREA OVER NICKEL UNDERPLATING OVERALL.
- 3) ASSEMBLY MATES WITH MOLEX P/N SDA-71660-****.
- 4) CONFORMS TO PRODUCT SPECIFICATION PS-71660.
- 5) CENTER PEG IS ONLY ON I20 AND I30 CIRCUIT ASSEMBLIES.
- 6) RECOMMENDED P.C. BOARD THICKNESS IS .062 (1.6).
- 7) FOUR DIGIT DATE CODE (WK YR), EXAMPLE => 26 96 LOCATED IN AREA INDICATED.
- 8) SEE CHART ON SHEET 2 FOR PACKAGING INFORMATION.

NOTE FOR LEAD FREE CONVERSION:

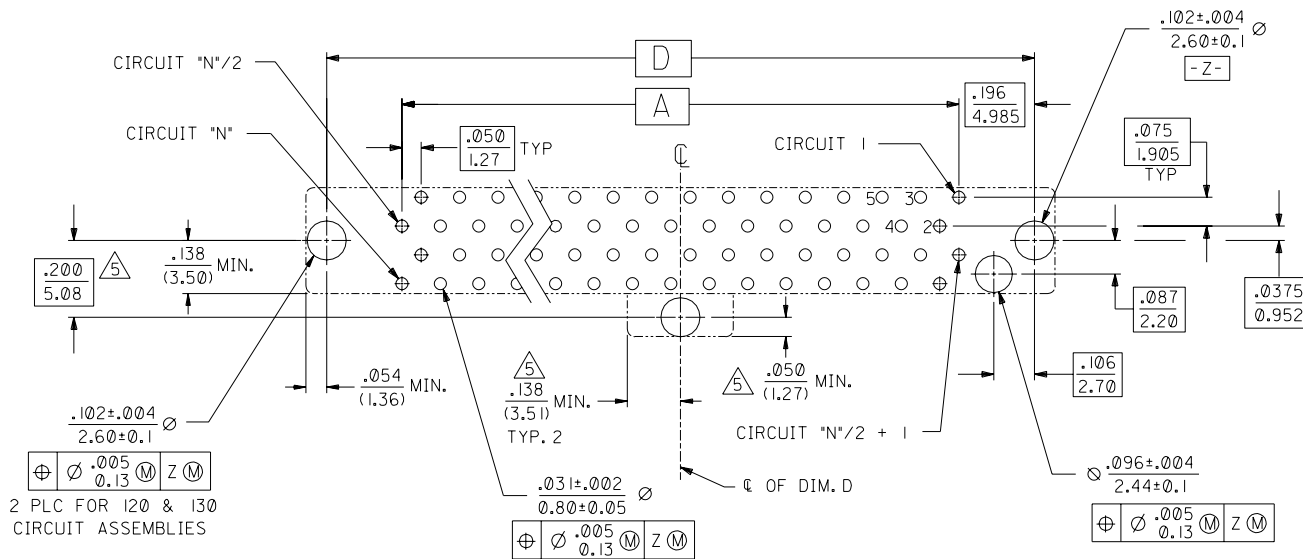
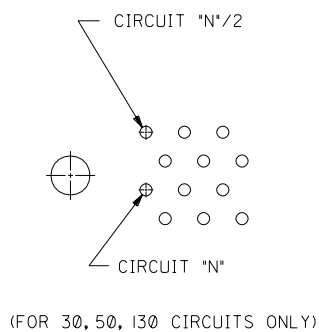
THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH LEAD.



60 CIRCUIT ASSEMBLY SHOWN
SCALE- 2:1

| | | | | | | | | |
|-----------------------------------------------------------------------------------------------------------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------|----------------------------------------------------------------|--------------------------------------------------------------------------------------------|--------------------------------|----------------------|------------------------|
| CHG TERMINAL MATL FC NO: UCP2005-0775 DRAWN: BARKER 2005/06/13 CHKD: MORGAN 2005/06/13 APPR: SMILLER 2005/06/23 | QUALITY SYMBOLS ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) | | DIMENSION STYLE IN/MM | | SCALE 1:1 | DESIGN UNITS INCH | THIRD ANGLE PROJECTION |
| | | 4 PLACES ± --- ± --- 3 PLACES ± --- ± .005 2 PLACES ± 0.13 ± .010 1 PLACE ± 0.25 ± --- ANGULAR ±1/2° | DRAWN BY RAN CHECKED BY RAN APPROVED BY CAB MATERIAL NO. SEE TABLE SIZE C | DATE 1992/06/15 DATE 1992/06/15 DATE 1992/06/15 | TITLE SALES ASSEMBLY MOLEX EBBI 50D VERTICAL PLUG CONNECTOR MOLEX INCORPORATED | DOCUMENT NO. SDA-71661-1*** | SHEET NO. 1 OF 2 | |

| | |
|-----|-----|
| 2 | K |
| 1 | M |
| SHT | REV |



RECOMMENDED PC BOARD LAYOUT Δ
COMPONENT SIDE
(FOR 40, 60, 68, 80, 100, 120 CIRCUITS ONLY)

| 71661-1430 | 015-92-2530 | 130 | 3.200 (81.28) | 3.426 (87.02) | 3.699 (93.95) | 3.592 (91.25) | .110 (2.79) | TRAYS PER PK-71660 |
|--------------------|-------------|--------------------|---------------|---------------|---------------|---------------|-------------|-------------------------|
| 71661-1420 | 015-92-2520 | 120 | 2.950 (74.93) | 3.176 (80.67) | 3.449 (87.60) | 3.342 (84.90) | .110 (2.79) | TRAYS PER PK-71660 |
| 71661-1400 | 015-92-2500 | 100 | 2.450 (62.23) | 2.676 (67.97) | 2.949 (74.90) | 2.842 (72.20) | .110 (2.79) | TRAYS PER PK-71660 |
| 71661-1381 | 015-92-2481 | 80 | 1.950 (49.53) | 2.176 (55.27) | 2.449 (62.20) | 2.342 (59.50) | .110 (2.79) | TUBES PER PK-70873-0817 |
| 71661-1380 | 015-92-2480 | 80 | 1.950 (49.53) | 2.176 (55.27) | 2.449 (62.20) | 2.342 (59.50) | .110 (2.79) | TRAYS PER PK-71660 |
| 71661-1368 | 015-92-2468 | 68 | 1.650 (41.91) | 1.875 (47.65) | 2.149 (54.58) | 2.042 (51.88) | .110 (2.79) | TRAYS PER PK-71660 |
| 71661-1360 | 015-92-2460 | 60 | 1.450 (36.83) | 1.676 (42.57) | 1.949 (49.50) | 1.842 (46.80) | .110 (2.79) | TRAYS PER PK-71660 |
| 71661-1350 | 015-92-2450 | 50 | 1.200 (30.48) | 1.426 (36.22) | 1.699 (43.15) | 1.592 (40.45) | .110 (2.79) | TRAYS PER PK-71660 |
| 71661-1340 | 015-92-2440 | 40 | .950 (24.13) | 1.176 (29.87) | 1.449 (36.80) | 1.342 (34.10) | .110 (2.79) | TRAYS PER PK-71660 |
| 71661-1330 | 015-92-2430 | 30 | .700 (17.78) | .925 (23.52) | 1.199 (30.45) | 1.092 (27.75) | .110 (2.79) | TRAYS PER PK-71660 |
| 71661-1130 | 015-92-2130 | 130 | 3.200 (81.28) | 3.426 (87.02) | 3.699 (93.95) | 3.592 (91.25) | .134 (3.40) | TRAYS PER PK-71660 |
| 71661-1120 | 015-92-2120 | 120 | 2.950 (74.93) | 3.176 (80.67) | 3.449 (87.60) | 3.342 (84.90) | .134 (3.40) | TRAYS PER PK-71660 |
| 71661-1100 | 015-92-2100 | 100 | 2.450 (62.23) | 2.676 (67.97) | 2.949 (74.90) | 2.842 (72.20) | .134 (3.40) | TRAYS PER PK-71660 |
| 71661-1080 | 015-92-2080 | 80 | 1.950 (49.53) | 2.176 (55.27) | 2.449 (62.20) | 2.342 (59.50) | .134 (3.40) | TRAYS PER PK-71660 |
| 71661-1068 | 015-92-2068 | 68 | 1.650 (41.91) | 1.875 (47.65) | 2.149 (54.58) | 2.042 (51.88) | .134 (3.40) | TRAYS PER PK-71660 |
| 71661-1060 | 015-92-2060 | 60 | 1.450 (36.83) | 1.676 (42.57) | 1.949 (49.50) | 1.842 (46.80) | .134 (3.40) | TRAYS PER PK-71660 |
| 71661-1050 | 015-92-2050 | 50 | 1.200 (30.48) | 1.426 (36.22) | 1.699 (43.15) | 1.592 (40.45) | .134 (3.40) | TRAYS PER PK-71660 |
| 71661-1040 | 015-92-2040 | 40 | .950 (24.13) | 1.176 (29.87) | 1.449 (36.80) | 1.342 (34.10) | .134 (3.40) | TRAYS PER PK-71660 |
| 71661-1030 | 015-92-2030 | 30 | .700 (17.78) | .925 (23.52) | 1.199 (30.45) | 1.092 (27.75) | .134 (3.40) | TRAYS PER PK-71660 |
| ENGINEERING NUMBER | EDP NUMBER | CIRCUIT SIZE ("N") | A | B | C | D | E | PACKAGING |

| DIMENSIONS SHOWN (METRIC) INCH | | UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR $\pm 1/2^\circ$ | | MFG, SH, REV. LTR. REVISIONS | |
|------------------------------------------------------|------------|----------------------------------------------------------------|--------|-----------------------------------------------------------------------------------------------------------------------|--|
| 3 PLACE | $\pm .005$ | INCH | METRIC | REVISE ONLY ON CAD SYSTEM | |
| 2 PLACE | $\pm .01$ | ± 0.13 | --- | | |
| 1 PLACE | --- | ± 0.25 | --- | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | TITLE: SALES ASSEMBLY MOLEX EBBI 50D VERTICAL PLUG CONNECTOR | |
| PART NO. SEE TABLE | | | | SHEET NO. 2 DATE 6/15/92 | |
| DRWG. BY: RAN | | | | MOLEX INCORPORATED U.S.A. | |
| CHK'D BY: RAN | | | | 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 | |

71661

D

C

B

A