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Part Number:

0716612050

Status:

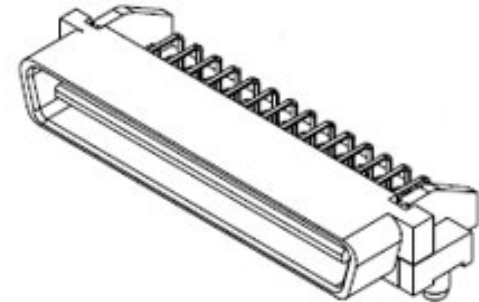
Active

Overview:

ebbi\_50d

Description:

1.27mm (.050") Pitch EBBI™ 50D Plug, Right Angle, 50 Circuits, 2.79mm (.110") PC Tail Length



Series

image - Reference only

Documents:

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

50

Circuits (maximum)

50

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

Yes

Material - Metal

Brass

Material - Plating Mating

Gold

Material - Plating Termination

Tin

Material - Resin

High Temperature Thermoplastic

Number of Rows

4

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](#) , [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   | 235                          |

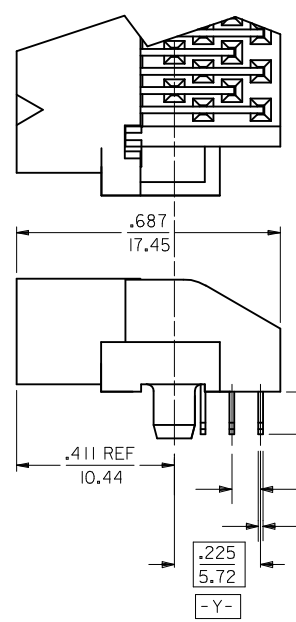
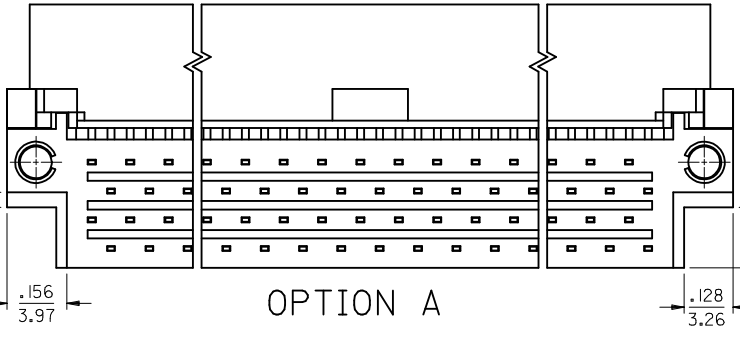
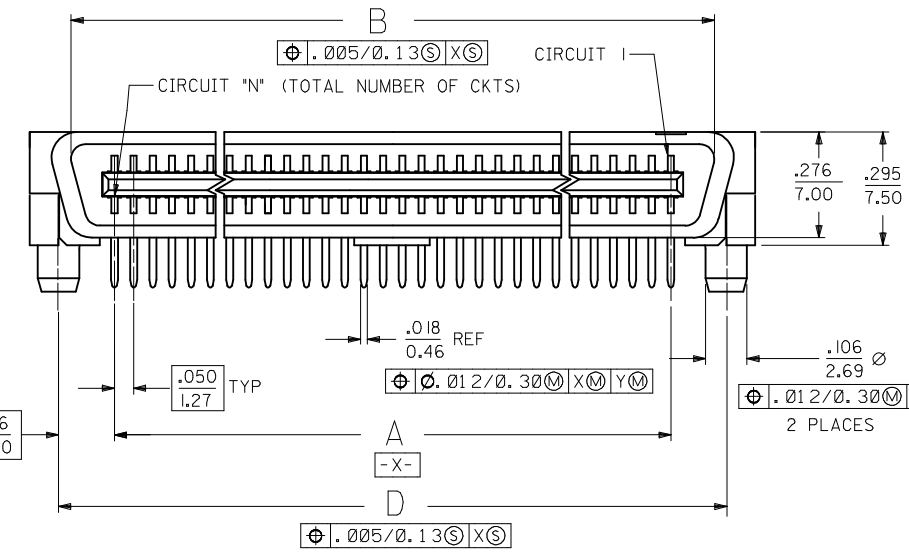
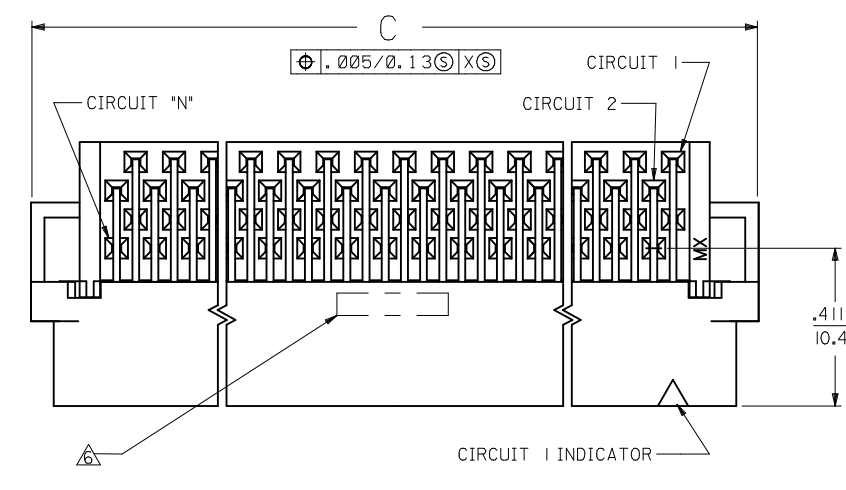
**Material Info**

**Reference - Drawing Numbers**

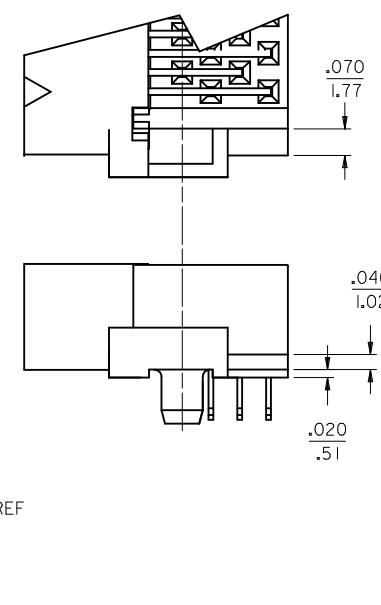
|                         |                |
|-------------------------|----------------|
| Packaging Specification | PK-70873-084*  |
| Product Specification   | PS-71660       |
| Sales Drawing           | SDA-71661-2*** |

This document was generated on 05/31/2010

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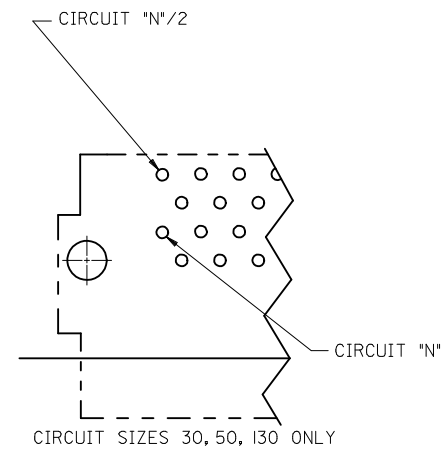
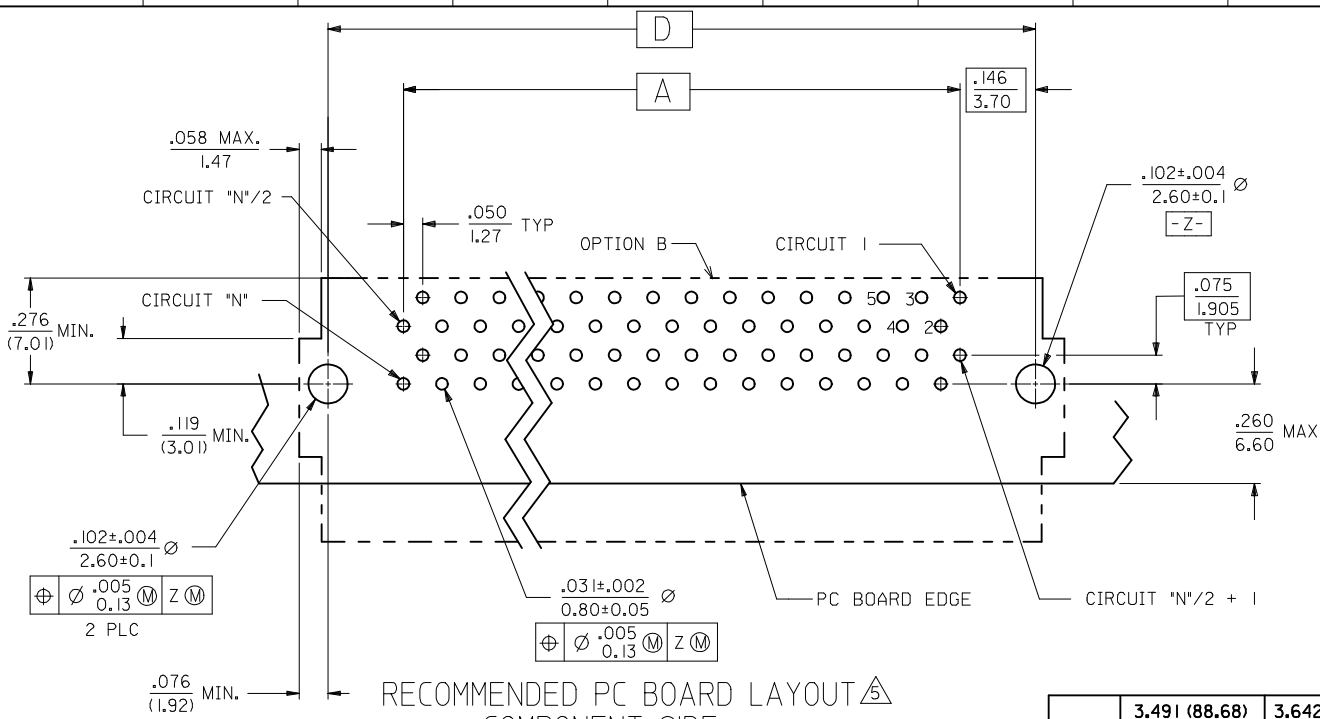
END DETAIL  
OPTION A  
(BOTH ENDS)



END DETAIL  
OPTION B  
(BOTH ENDS)

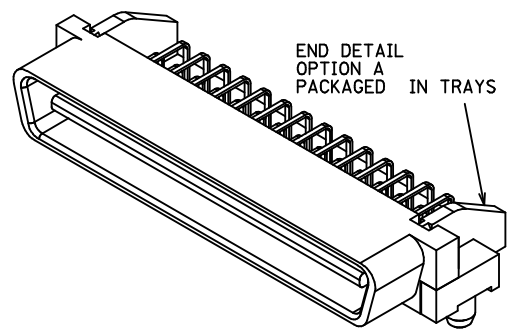
- NOTES:
1. MATERIAL:  
HOUSING: LIQUID CRYSTAL POLYMER (LCP), GLAS-FILLED, UL 94V-0,  
COLOR: BLACK  
TERMINALS: BRASS
  2. FINISH:  
TERMINAL: 0.76 MICROMETERS/30 MICROINCHES MINIMUM SELECTIVE GOLD  
IN CONTACT AREA, 1.27 MICROMETERS/50 MICROINCHES MINIMUM  
SELECTIVE TIN IN THE PC TAIL AREA; NICKEL UNDERPLATE OVERALL
  3. ASSEMBLY MATES WITH MOLEX P/N SDA-71660-\*\*\*\*
  4. CONFORMS TO PRODUCT SPEC: PS-71660
- RECOMMENDED PC BOARD THICKNESS IS .062/1.60
- FOUR DIGIT DATE CODE (WK,YR) EXAMPLE 26 96 LOCATED IN AREA SHOWN
- TOOLING STATUS: "X" INDICATES NO TOOLING AVAILABLE
- CONTACT FACTORY FOR FURTHER INFORMATION

|                 |  |                                 |  |                                                                     |  |                       |  |                                                            |  |                             |  |                                                                                                                                  |  |                                                          |  |                        |  |
|-----------------|--|---------------------------------|--|---------------------------------------------------------------------|--|-----------------------|--|------------------------------------------------------------|--|-----------------------------|--|----------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------------------------|--|------------------------|--|
| CHANGE MATERIAL |  | EC NO: 2008/12/19<br>2009/01/06 |  | DRAWN BY: DRWN:SBARRA<br>CHKD:BBARKER<br>APPR:SMILLER<br>2009/01/06 |  | QUALITY SYMBOLS       |  | GENERAL TOLERANCES (UNLESS SPECIFIED)                      |  | DIMENSION STYLE             |  | SCALE                                                                                                                            |  | DESIGN UNITS                                             |  | THIRD ANGLE PROJECTION |  |
|                 |  | N                               |  |                                                                     |  | DESCRIPTION           |  | mm INCH                                                    |  | IN/MM                       |  | 4:1                                                                                                                              |  | INCH                                                     |  | ⊙ □                    |  |
|                 |  |                                 |  |                                                                     |  | ▽=0                   |  | 4 PLACES ± --- ± ---                                       |  | DRAWN BY: RAN               |  | DATE: 1993/02/23                                                                                                                 |  | SALES ASSEMBLY<br>EBBI 50D RIGHT ANGLE<br>PLUG CONNECTOR |  |                        |  |
|                 |  |                                 |  | ▽=0                                                                 |  | 3 PLACES ± --- ± .010 |  | CHECKED BY: RAN                                            |  | DATE: 1993/02/23            |  |                                                                                                                                  |  |                                                          |  |                        |  |
|                 |  |                                 |  |                                                                     |  | 2 PLACES ± 0.25 ± --- |  | APPROVED BY: CAB                                           |  | DATE: 1993/02/23            |  |                                                                                                                                  |  |                                                          |  |                        |  |
|                 |  |                                 |  |                                                                     |  | 1 PLACE ± --- ± ---   |  | MATERIAL NO. SEE TABLE                                     |  | DOCUMENT NO. SDA-71661-2*** |  |                                                                                                                                  |  |                                                          |  |                        |  |
|                 |  |                                 |  |                                                                     |  | ANGULAR ±1/2°         |  | DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS |  | SIZE C                      |  | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX<br>INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |  | SHEET NO. 1 OF 2                                         |  |                        |  |

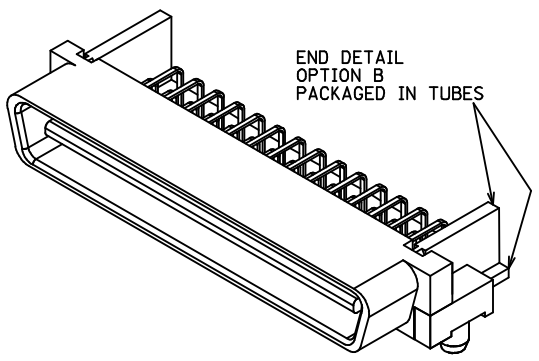


TRAY PACK  
PER SPEC.  
PK-70873-084\*

END DETAIL  
OPTION "A"



50 CIRCUIT ASSEMBLY SHOWN



END DETAIL  
OPTION B  
PACKAGED IN TUBES

|                |               |               |               |               |           |             |
|----------------|---------------|---------------|---------------|---------------|-----------|-------------|
| .125<br>(3.18) | 3.491 (88.68) | 3.642 (92.50) | 3.426 (87.02) | 3.200 (81.28) | 130       | 7166 I-2430 |
|                | 3.241 (82.33) | 3.392 (86.15) | 3.176 (80.67) | 2.950 (74.93) | 120       | 7166 I-2420 |
|                | 2.741 (69.63) | 2.892 (73.45) | 2.676 (67.97) | 2.450 (62.23) | 100       | 7166 I-2400 |
|                | 2.241 (56.93) | 2.392 (60.75) | 2.176 (55.27) | 1.950 (49.53) | 80        | 7166 I-2380 |
|                | 1.941 (49.31) | 2.092 (53.13) | 1.875 (47.65) | 1.650 (41.91) | 68        | 7166 I-2368 |
|                | 1.741 (44.23) | 1.892 (48.05) | 1.676 (42.57) | 1.450 (36.83) | 60        | 7166 I-2360 |
|                | 1.491 (37.88) | 1.642 (41.70) | 1.426 (36.22) | 1.200 (30.48) | 50        | 7166 I-2350 |
|                | 1.241 (31.53) | 1.392 (35.35) | 1.176 (29.87) | .950 (24.13)  | 40        | 7166 I-2340 |
| .110<br>(2.79) | .991 (25.18)  | 1.142 (29.00) | .925 (23.52)  | .700 (17.78)  | 30        | 7166 I-2330 |
|                | 3.491 (88.68) | 3.642 (92.50) | 3.426 (87.02) | 3.200 (81.28) | 130       | 7166 I-2130 |
|                | 3.241 (82.33) | 3.392 (86.15) | 3.176 (80.67) | 2.950 (74.93) | 120       | 7166 I-2120 |
|                | 2.741 (69.63) | 2.892 (73.45) | 2.676 (67.97) | 2.450 (62.23) | 100       | 7166 I-2100 |
|                | 2.241 (56.93) | 2.392 (60.75) | 2.176 (55.27) | 1.950 (49.53) | 80        | 7166 I-2080 |
|                | 1.941 (49.31) | 2.092 (53.13) | 1.875 (47.65) | 1.650 (41.91) | 68        | 7166 I-2068 |
|                | 1.741 (44.23) | 1.892 (48.05) | 1.676 (42.57) | 1.450 (36.83) | 60        | 7166 I-2060 |
|                | 1.491 (37.88) | 1.642 (41.70) | 1.426 (36.22) | 1.200 (30.48) | 50        | 7166 I-2050 |
|                | 1.241 (31.53) | 1.392 (35.35) | 1.176 (29.87) | .950 (24.13)  | 40        | 7166 I-2040 |
|                | .991 (25.18)  | 1.142 (29.00) | .925 (23.52)  | .700 (17.78)  | 30        | 7166 I-2030 |
| E              | D             | C             | B             | A             | CKT ("N") | ITEM NUMBER |

CHANGE MATERIAL  
EC NO: UCP2009-1254  
DRWN:MS BARRA 2008/12/19  
CHKD:BBARKER 2009/01/06  
APPR:SMILLER 2009/01/06

REV N

QUALITY SYMBOLS  
▽=0  
▽=0

DESCRIPTION

GENERAL TOLERANCES (UNLESS SPECIFIED)  
4 PLACES ± --- ± ---  
3 PLACES ± --- ± .010  
2 PLACES ± 0.25 ± ---  
1 PLACE ± --- ± ---  
ANGULAR ± 1/2°

DRAFT WHERE APPLICABLE  
MUST REMAIN  
WITHIN DIMENSIONS

DIMENSION STYLE  
IN/MM

DRAWN BY  
RAN  
CHECKED BY  
RAN  
APPROVED BY  
CAB

DRAWN DATE  
1993/02/23  
DATE  
1993/02/23  
DATE  
1993/02/23

MATERIAL NO.  
SEE TABLE

SIZE  
C

SCALE  
4:1

DESIGN UNITS  
INCH

THIRD ANGLE PROJECTION

SALES ASSEMBLY  
EBBI 50D RIGHT ANGLE  
PLUG CONNECTOR

MOLEX INCORPORATED

DOCUMENT NO.  
SDA-71661-2\*\*\*

SHEET NO.  
2 OF 2

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