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Part Number: [0716612400](#)
Status: **Active**
Overview: [ebbi_50d](#)
Description: 1.27mm (.050") Pitch EBBI™ 50D Plug, Right Angle, 100 Circuits, 3.18mm (.125") 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) 100
 Circuits (maximum) 100
 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) 0.125 In
 PC Tail Length (mm) 3.18 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

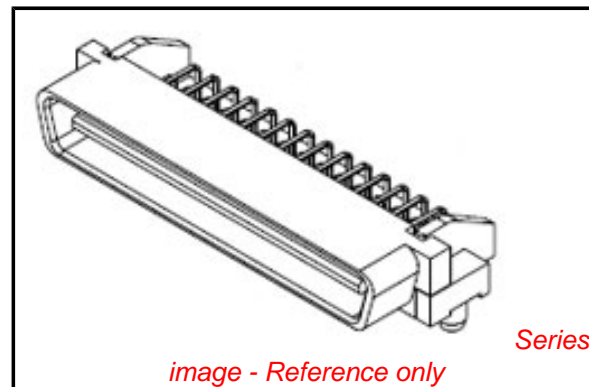


image - Reference only

EU RoHS

ELV and RoHS Compliant
REACH SVHC
 Not Reviewed
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 |

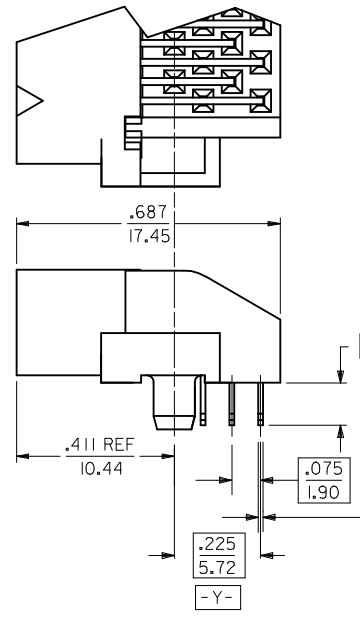
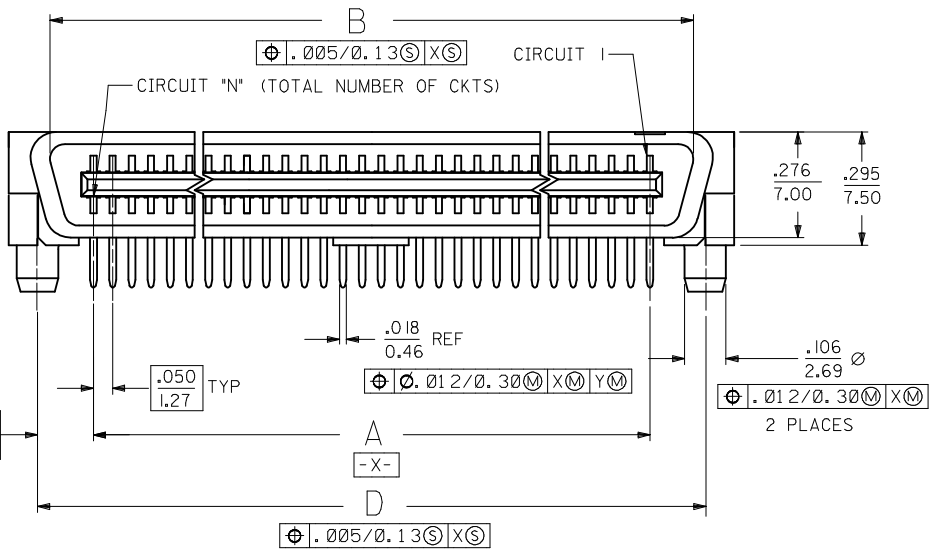
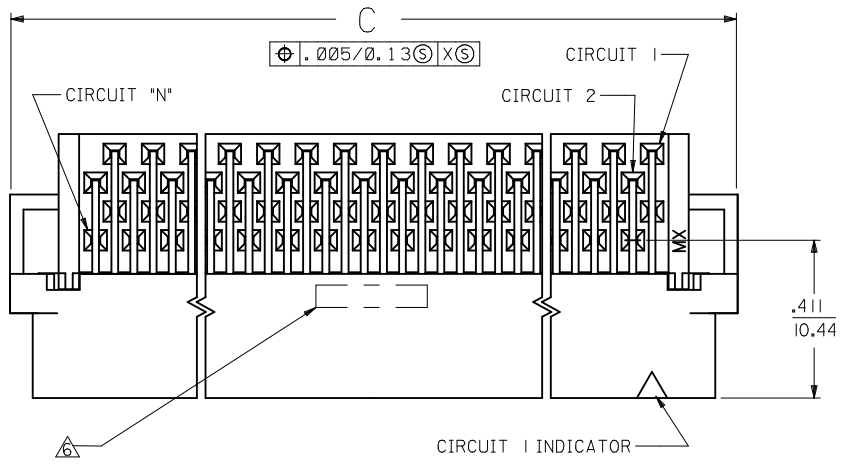
Material Info**Reference - Drawing Numbers**

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

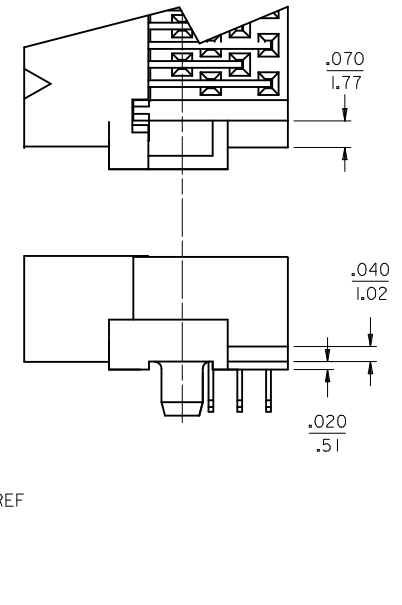
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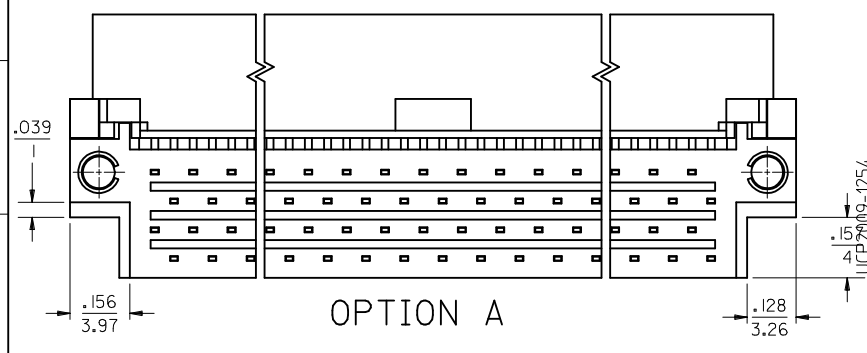
NOTES:
 1. MATERIAL:
 HOUSING: LIQUID CRYSTAL POLYMER (LCP), GLAS-FILLED, UL 94V-0,
 COLOR: BLASK
 TERMINALS: BRASS
 2. FINISH:
 TERMINAL: 0.76 MICROMETERS/30 MICROINCHES MINIMUM SELECTIVE GOLD
 IN CONTACT AREA, 1.27 MICROMETERS/50 MICROINCHES MINIMUM
 SELECTIVE TIN IN THE PC TAIL AREA; NICKEL UNDERPLATE 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



END DETAIL
 OPTION A
 (BOTH ENDS)



END DETAIL
 OPTION B
 (BOTH ENDS)



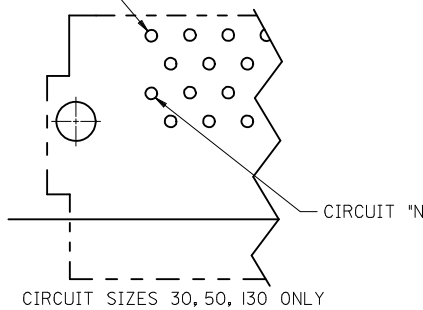
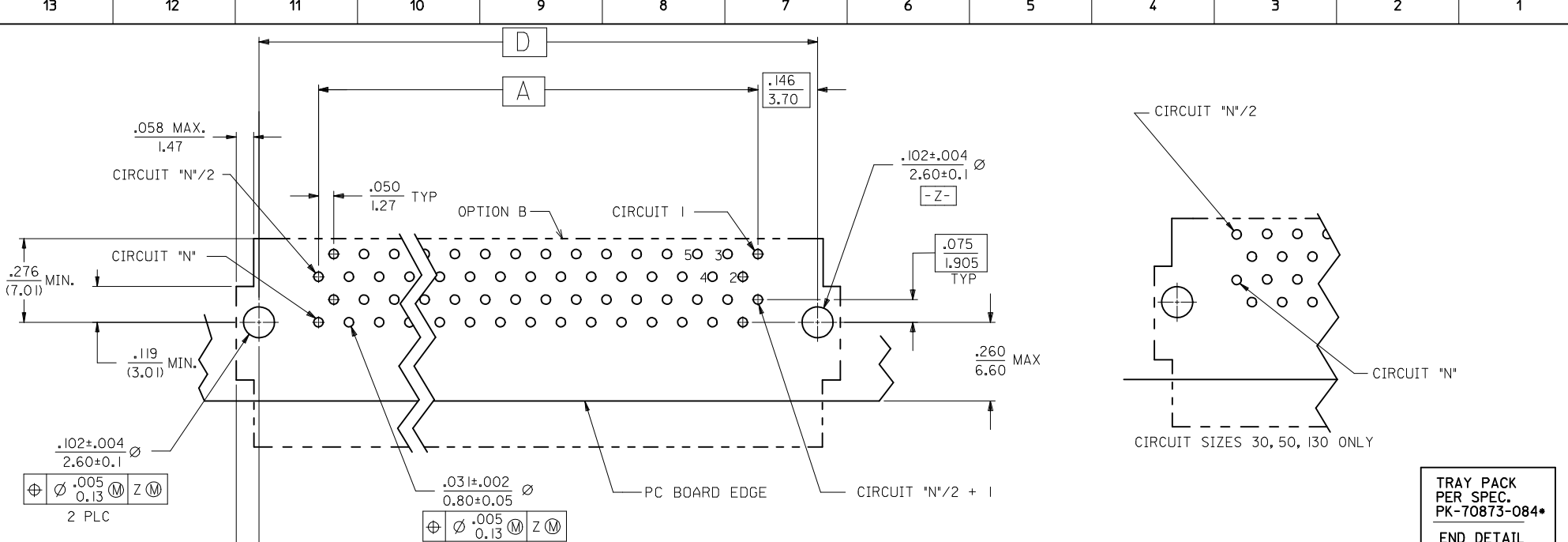
OPTION A

| REV | DESCRIPTION |
|-----|--|
| N | CHANGE MATERIAL EC NO: DRWIN'S BARRA 2008/12/19 CHKD: BARKER 2009/01/06 APPR: MILLER 2009/01/06 |

| QUALITY SYMBOLS | |
|-----------------|-------|
| | 0 |
| | 0.010 |

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

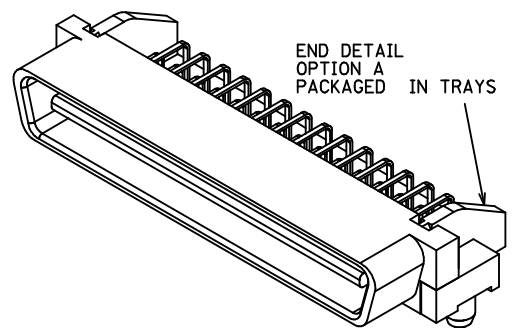
| | | | | |
|--|--------------------|---|----------------------|------------------------|
| DIMENSION STYLE IN/MM | | SCALE 4:1 | DESIGN UNITS INCH | THIRD ANGLE PROJECTION |
| DRAWN BY RAN | DATE 1993/02/23 | TITLE SALES ASSEMBLY EBBI 50D RIGHT ANGLE PLUG CONNECTOR | | |
| CHECKED BY RAN | DATE 1993/02/23 | MATERIAL NO. SDA-71661-2*** | | |
| APPROVED BY CAB | DATE 1993/02/23 | SHEET NO. 1 OF 2 | | |
| 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 | | | | |



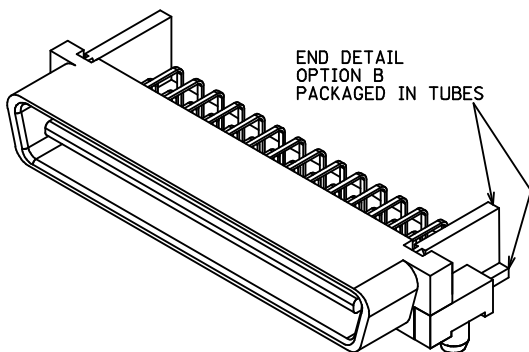
TRAY PACK PER SPEC.
PK-70873-084*

END DETAIL OPTION "A"

RECOMMENDED PC BOARD LAYOUT COMPONENT SIDE



50 CIRCUIT ASSEMBLY SHOWN



| | | | | | | |
|----------------|----------------|---------------|---------------|---------------|---------------|------------|
| .125 (3.18) | 3.491 (88.68) | 3.642 (92.50) | 3.426 (87.02) | 3.200 (81.28) | 130 | 71661-2430 |
| | 3.241 (82.33) | 3.392 (86.15) | 3.176 (80.67) | 2.950 (74.93) | 120 | 71661-2420 |
| | 2.741 (69.63) | 2.892 (73.45) | 2.676 (67.97) | 2.450 (62.23) | 100 | 71661-2400 |
| | 2.241 (56.93) | 2.392 (60.75) | 2.176 (55.27) | 1.950 (49.53) | 80 | 71661-2380 |
| | 1.941 (49.31) | 2.092 (53.13) | 1.875 (47.65) | 1.650 (41.91) | 68 | 71661-2368 |
| | 1.741 (44.23) | 1.892 (48.05) | 1.676 (42.57) | 1.450 (36.83) | 60 | 71661-2360 |
| | 1.491 (37.88) | 1.642 (41.70) | 1.426 (36.22) | 1.200 (30.48) | 50 | 71661-2350 |
| | 1.241 (31.53) | 1.392 (35.35) | 1.176 (29.87) | .950 (24.13) | 40 | 71661-2340 |
| | .991 (25.18) | 1.142 (29.00) | .925 (23.52) | .700 (17.78) | 30 | 71661-2330 |
| | .110 (2.79) | 3.491 (88.68) | 3.642 (92.50) | 3.426 (87.02) | 3.200 (81.28) | 130 |
| 3.241 (82.33) | | 3.392 (86.15) | 3.176 (80.67) | 2.950 (74.93) | 120 | 71661-2120 |
| 2.741 (69.63) | | 2.892 (73.45) | 2.676 (67.97) | 2.450 (62.23) | 100 | 71661-2100 |
| 2.241 (56.93) | | 2.392 (60.75) | 2.176 (55.27) | 1.950 (49.53) | 80 | 71661-2080 |
| 1.941 (49.31) | | 2.092 (53.13) | 1.875 (47.65) | 1.650 (41.91) | 68 | 71661-2068 |
| 1.741 (44.23) | | 1.892 (48.05) | 1.676 (42.57) | 1.450 (36.83) | 60 | 71661-2060 |
| 1.491 (37.88) | | 1.642 (41.70) | 1.426 (36.22) | 1.200 (30.48) | 50 | 71661-2050 |
| 1.241 (31.53) | | 1.392 (35.35) | 1.176 (29.87) | .950 (24.13) | 40 | 71661-2040 |
| .991 (25.18) | | 1.142 (29.00) | .925 (23.52) | .700 (17.78) | 30 | 71661-2030 |
| E | | D | C | B | A | CKT ("N") |

| CHANGE MATERIAL EC NO: UCP2009-1254 DRWIN:SBARRA 2008/12/19 CHKD:BBARKER 2009/01/06 APPR:SMILLER 2009/01/06 REV: N | QUALITY SYMBOLS ▽=0 ▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>±.010</td> <td>±.0004</td> </tr> <tr> <td>3 PLACES</td> <td>±.010</td> <td>±.0004</td> </tr> <tr> <td>2 PLACES</td> <td>±.025</td> <td>±.0010</td> </tr> <tr> <td>1 PLACE</td> <td>±.050</td> <td>±.0020</td> </tr> </table> ANGULAR ±1/2° | | mm | INCH | 4 PLACES | ±.010 | ±.0004 | 3 PLACES | ±.010 | ±.0004 | 2 PLACES | ±.025 | ±.0010 | 1 PLACE | ±.050 | ±.0020 | DIMENSION STYLE IN/MM | SCALE 4:1 | DESIGN UNITS INCH | THIRD ANGLE PROJECTION |
|--|-------------------------------|--|----------------------------------|---------------------------------------|----------------------------|----------|-------|--------|----------|-------|--------|----------|-------|--------|---------|-------|--------|---------------------------------|---------------------|-----------------------------|------------------------|
| | | | | mm | INCH | | | | | | | | | | | | | | | | |
| 4 PLACES | ±.010 | ±.0004 | | | | | | | | | | | | | | | | | | | |
| 3 PLACES | ±.010 | ±.0004 | | | | | | | | | | | | | | | | | | | |
| 2 PLACES | ±.025 | ±.0010 | | | | | | | | | | | | | | | | | | | |
| 1 PLACE | ±.050 | ±.0020 | | | | | | | | | | | | | | | | | | | |
| DRAWN BY RAN 1993/02/23 | CHECKED BY RAN 1993/02/23 | APPROVED BY CAB 1993/02/23 | MATERIAL NO. SEE TABLE | DOCUMENT NO. SDA-71661-2*** | SHEET NO. 2 OF 2 | | | | | | | | | | | | | | | | |

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

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