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Part Number:

0875378819

Status:

Active

Description:

1.27mm (.050") Pitch EBBI™ 50D Receptacle, Through Hole, Right Angle, Blind Mate, with Beveled Metal Pin and Plastic Peg, 0.76µm (30µ") Gold (Au) Selective Plating, 68 Circuits, 1.70mm (.067) PC Tail Length, without Kapton Tape, Leadfree

Documents:

3D Model

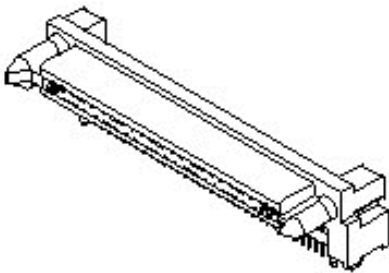
Drawing (PDF)

RoHS Certificate of Compliance (PDF)

|                                |                                                         |
|--------------------------------|---------------------------------------------------------|
| General                        |                                                         |
| Product Family                 | PCB Receptacles                                         |
| Series                         | 87537                                                   |
| Application                    | Board-to-Board                                          |
| Comments                       | <LI>Lubricant at the Contact<LI>Z-Height: 3.00mm (.118) |
| Product Name                   | EBBI™                                                   |
| Physical                       |                                                         |
| Circuits (Loaded)              | 68                                                      |
| Color - Resin                  | Black                                                   |
| Durability (mating cycles max) | 2,000                                                   |
| 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                    | Right Angle                                             |
| PC Tail Length (in)            | 0.067 In                                                |
| PC Tail Length (mm)            | 1.70 mm                                                 |
| PCB Locator                    | Yes                                                     |
| PCB Retention                  | Yes                                                     |
| PCB Thickness Recommended (in) | 0.045 In                                                |
| PCB Thickness Recommended (mm) | 1.20 mm                                                 |
| Packaging Type                 | Tray                                                    |
| Pitch - Mating Interface (in)  | 0.050 In                                                |
| Pitch - Mating Interface (mm)  | 1.27 mm                                                 |
| Plating min: Mating (µin)      | 30.4                                                    |
| Plating min: Mating (µm)       | 0.76                                                    |
| Plating min: Termination (µin) | 101.6                                                   |
| Plating min: Termination (µm)  | 2.54                                                    |
| Polarized to Mating Part       | Yes                                                     |
| 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 |

|                                                |   |
|------------------------------------------------|---|
| Solder Process Data                            |   |
| Duration at Max. Process Temperature (seconds) | 5 |



Series  
image - Reference only

EU RoHS

ELV and RoHS Compliant

REACH SVHC

Contains SVHC: No

Halogen-Free

Status

Not Reviewed

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  
87537Series

Mates With  
71661 EBBI™ Right Angle Blind Mate Plug, EBBI™ Vertical Blind Mate Plug

|                                         |                              |
|-----------------------------------------|------------------------------|
| Lead-free Process Capability            | SMC & Wave Capable (TH only) |
| Max. Cycles at Max. Process Temperature | 1                            |
| Process Temperature max. C              | 265                          |

**Material Info**

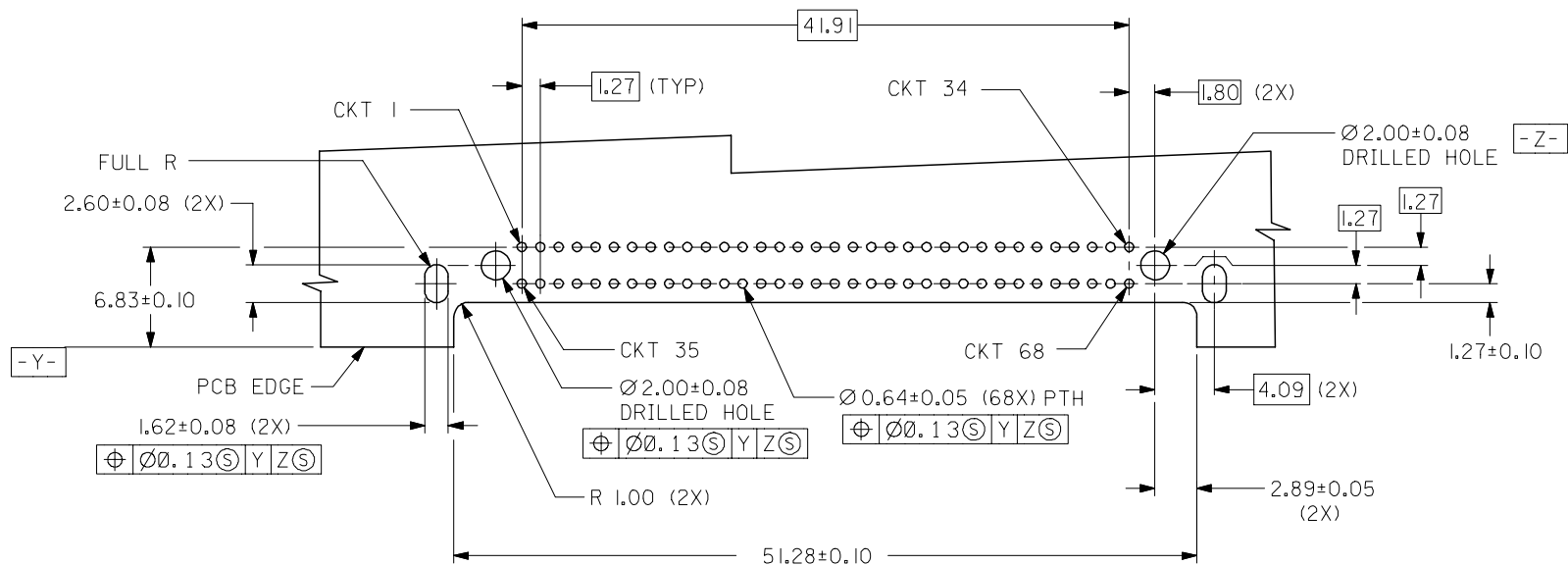
**Reference - Drawing Numbers**

|               |              |
|---------------|--------------|
| Sales Drawing | SD-87537-002 |
|---------------|--------------|

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AA



### RECOMMENDED PC BOARD LAYOUT COMPONENT SIDE

#### NOTES:

- 1 MATERIALS:  
HOUSING- LCP, 30% GLASS FILLED, UL94V-0, BLACK.  
TERMINALS- PHOSPHOR BRONZE.
- 2 PLATING:  
0.76μm MIN. GOLD IN SELECTIVE CONTACT AREA AND,  
2.54μm MIN. TIN IN SOLDER TAIL AREA, BOTH  
OVER 1.27μm MIN. NICKEL.
-  3 RECOMMENDED P.C. BOARD THICKNESS IS 1.57+/-0.13MM.
- 4 CIRCUIT #58 TO BE RECESSED 0.50mm BEHIND  
ALL OTHER CONTACTS.
-  5 PART IS LUBRICATED AT TERMINAL CONTACTS TO MINIMISE  
UNMATE FORCE.

|                                                                                  |                                        |                                                                                                                               |                                   |                                       |        |                            |                    |                                                                                         |                              |                           |  |      |
|----------------------------------------------------------------------------------|----------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|-----------------------------------|---------------------------------------|--------|----------------------------|--------------------|-----------------------------------------------------------------------------------------|------------------------------|---------------------------|--|------|
| OBS TIN/LEAD P/N<br>EC NO: S2006-0729<br>DRWN:MLONG<br>CHKD:SHONG<br>APPR:KCLING | 2006/02/27<br>2006/02/27<br>2006/02/28 | DESCRIPTION                                                                                                                   | QUALITY SYMBOLS<br><br>▽=0<br>▽=0 | GENERAL TOLERANCES (UNLESS SPECIFIED) |        | DIMENSION STYLE<br>MM ONLY |                    | SCALE<br>NTS                                                                            | DESIGN UNITS<br>METRIC       | THIRD ANGLE<br>PROJECTION |  |      |
|                                                                                  |                                        |                                                                                                                               |                                   | mm                                    | INCH   | DRAWN BY<br>KSEE           | DATE<br>2003/01/22 | TITLE<br>EBBI, RECEPTACLE, CONN.<br>1.27MM CTR, 68 CKTS, BTB<br>B/MATE, 2.54MM HT., R/A |                              |                           |  |      |
|                                                                                  |                                        |                                                                                                                               |                                   | 4 PLACES                              | ± ---  | ± ---                      | CHECKED BY         |                                                                                         |                              |                           |  | DATE |
|                                                                                  |                                        |                                                                                                                               |                                   | 3 PLACES                              | ± ---  | ± ---                      | KCLING             | 2003/02/20                                                                              | MOLEX INCORPORATED           |                           |  |      |
|                                                                                  |                                        |                                                                                                                               |                                   | 2 PLACES                              | ± 0.25 | ± ---                      | APPROVED BY        | DATE                                                                                    |                              |                           |  |      |
|                                                                                  |                                        |                                                                                                                               |                                   | 1 PLACE                               | ± ---  | ± ---                      | SKTOH              | 2003/02/20                                                                              | DOCUMENT NO.<br>SD-87537-030 |                           |  |      |
|                                                                                  |                                        |                                                                                                                               |                                   | ANGULAR ± 3 °                         |        | MATERIAL NO.               |                    | SHEET NO.<br>2 OF 2                                                                     |                              |                           |  |      |
| DRAFT WHERE APPLICABLE<br>MUST REMAIN<br>WITHIN DIMENSIONS                       |                                        | SEE TABLE                                                                                                                     |                                   |                                       |        |                            |                    |                                                                                         |                              |                           |  |      |
| C                                                                                | REV                                    | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION |                                   |                                       |        |                            |                    |                                                                                         |                              |                           |  |      |