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Part Number: [0716607508](#)
Status: **Active**
Description: 1.27mm (.050") Pitch EBBI™ 50D Receptacle, Vertical, Blind-Mate, 80 Circuits

Documents:

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

Agency Certification

CSA LR19980
 UL E29179

General

Product Family PCB Receptacles
 Series [71660](#)
 Application Board-to-Board
 Comments Circuits 1, 36-43, 45, 46, and 75-80 are advanced terminals for sequential first-mate/last-break mating EBBI™
 Product Name

Physical

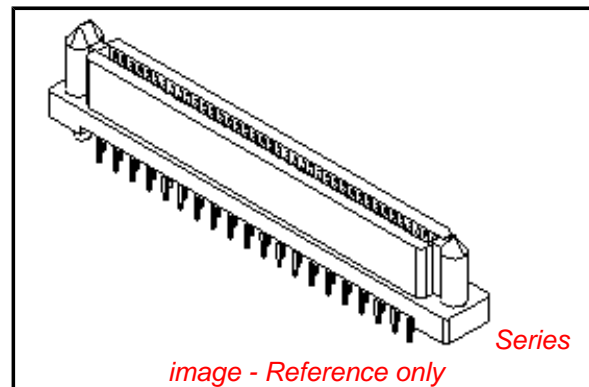
Circuits (Loaded) 80
 Color - Resin Black
 Durability (mating cycles max) 2,000
 Flammability 94V-0
 Glow-Wire Compliant No
 Material - Metal Phosphor Bronze
 Material - Plating Mating Gold
 Material - Plating Termination Tin
 Material - Resin High Temperature Thermoplastic
 Number of Rows 2
 Orientation Vertical
 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
 Plating min: Mating (µin) 30
 Plating min: Mating (µm) 0.75
 Plating min: Termination (µin) 10
 Plating min: Termination (µm) 0.25
 Polarized to PCB 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

Lead-free Process Capability SMC & Wave Capable (TH only)
 Process Temperature max. C 260



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

[71660Series](#)

Mates With

[71661-7xxx](#) , [71661-25xx](#)

Material Info

Reference - Drawing Numbers

Sales Drawing

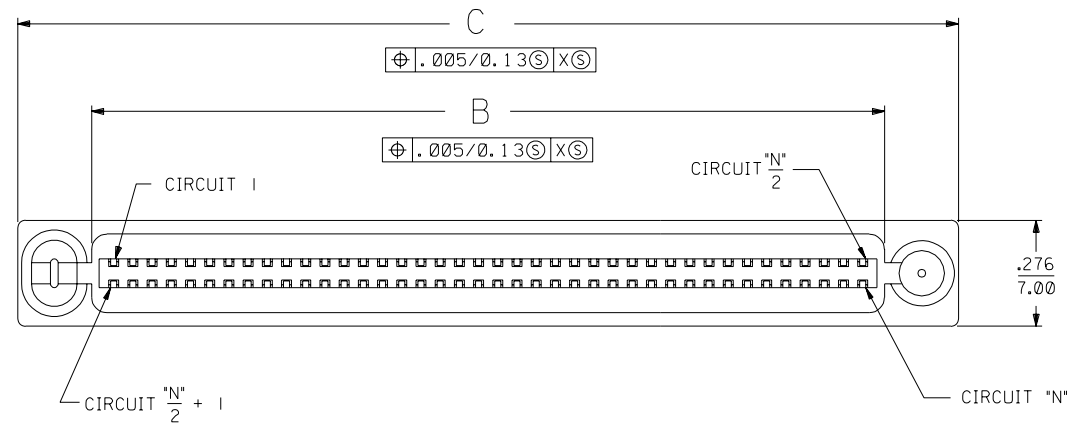
SDA-71660-75**

This document was generated on 04/14/2010

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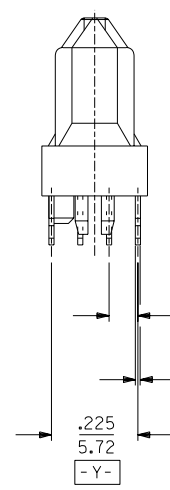
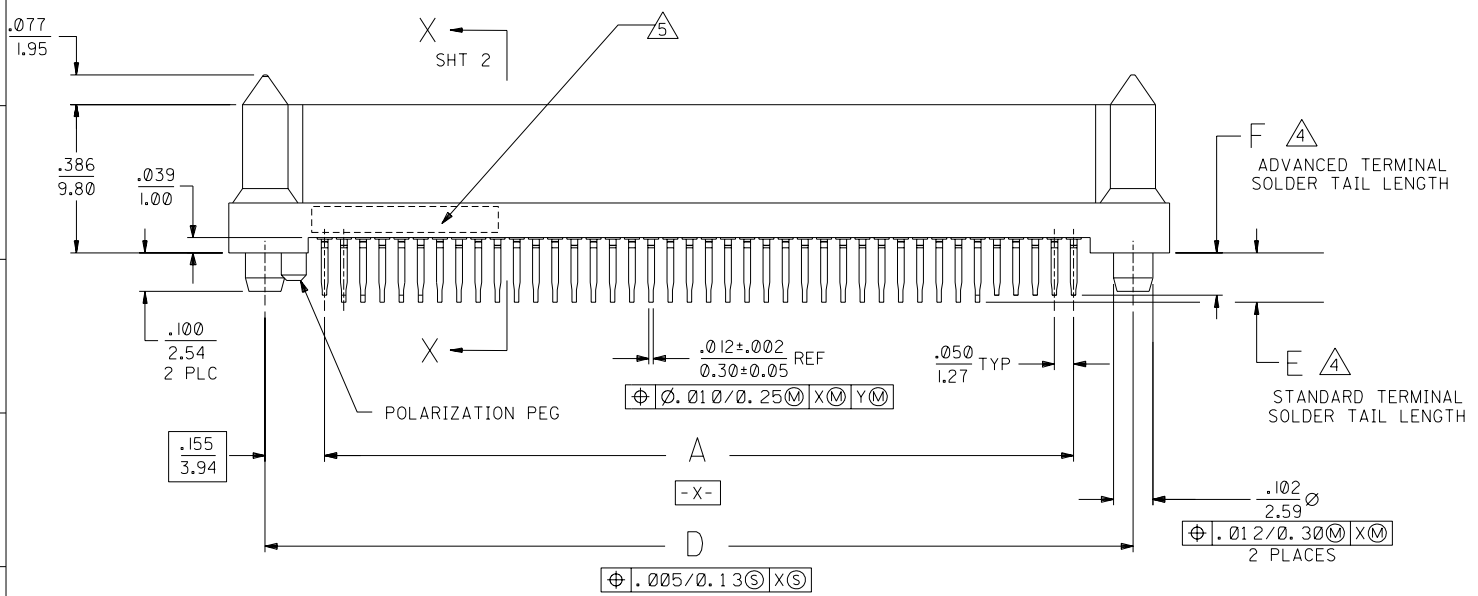
NOTES:

- 1) MATERIALS:
HOUSING- LCP, GLASS FILLED, UL94V-0, BLACK.
TERMINALS- COPPER ALLOY
- 2) FINISH:
TERMINALS:
.000030/(0.00076) MINIMUM GOLD IN CONTACT AREA AND
.000050/(0.00127) MINIMUM TIN IN TAIL AREA OVER
.000075/(0.00191) MINIMUM NICKEL UNDERPLATING OVERALL.
- 3) ASSEMBLY MATES WITH MOLEX P/N SDA-71661-7***.
CONFORMS TO PRODUCT SPECIFICATION PS-71660.
- 4) SEE TABLE ON SHEET 2 FOR ADVANCED TERMINAL LIST
- 5) FOUR DIGIT DATE CODE (WK YR), EXAMPLE => 26 96
LOCATED IN AREA INDICATED.



NOTE FOR LEAD FREE CONVERSION:

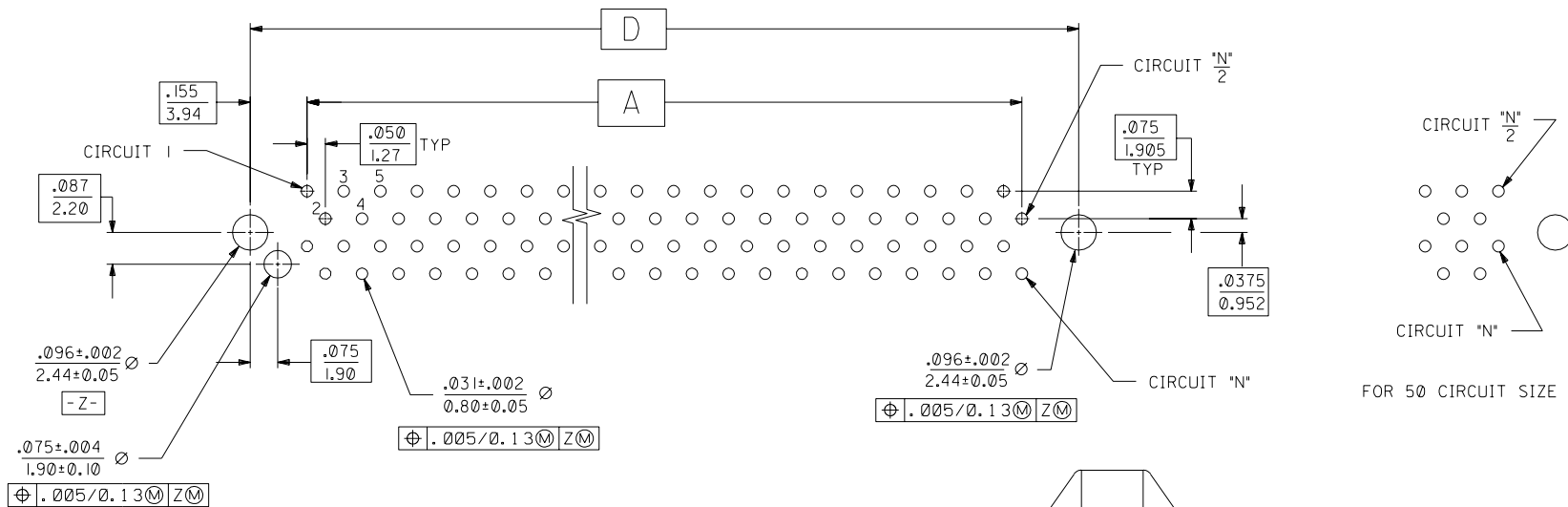
THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO ROHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH LEAD.



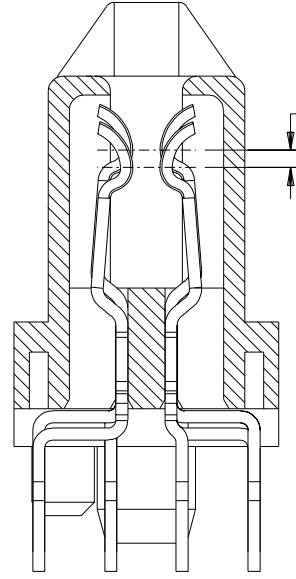
| | |
|----|---|
| J | LEAD FREE CONV ECN UCP2004-2096 RKADAMS 04/04/23 |
| I | ADDED PART NO'S ECN UDT2002-1289 BBARKER 02/05/10 |
| H | REVISED UDT2001-1091 BSMART 01/04/11 |
| GI | ECN UDT 2000-1086 ACHAMMER 00/06/05 |
| G | REVISED PER ECN U71314 ACHAMMER 97/4/28 |
| F | REVISED PER ECN U6090 ACHAMMER 96/7/26 |
| E | REVISED PER ECN U60641 11-29-95 DRS |
| D | REVISED PER ECN U60564 11-8-95 RAN |
| C | REV. ADVANCED PIN PER ECN U51015 4-7-95 RAN |
| B | REV. ADVANCED PIN PER ECN U50727 1-24-95 RAN |
| A | INITIAL RELEASE PER ECN U50643 12-29-94 RAN |

| | | | | | | | |
|--|---------------|---|---|---------------|------|---------------------------|--|
| DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2° | | ▽ = 0 | | ▽ = 0 | | REVISE ONLY ON CAD SYSTEM | |
| INCH METRIC | | TITLE | | MFG, SH, REV. | | LTR. | |
| 3 PLACE ± .005 | --- | SALES ASSY, EBBI 50D, VERTICAL, BLIND MATE RCPT W/ ADVANCED TERMINALS | | 2 I | | REVISIONS | |
| 2 PLACE ± --- ± 0.13 | --- | MOLEX INCORPORATED | | 1 J | | | |
| 1 PLACE --- ± --- | --- | SHEET NO. DATE U.S.A. 1 OF 2 12 / 6 / 94 | | | | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | PART NO. DRWG. NO. | | | | | |
| SEE TABLE | | SDA-71660-75** | | | | | |
| DRWG. BY RAN | CHK'D. BY RAN | FILE NAME | THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION | DIV. | SIZE | | |
| APP'D. BY CAB | SCALE 4: 1 | 57166075 | | C | C | | |

| 13 | 12 | 11 | 10 | 9 | 8 | 7 | 6 | 71660 | 4 | 3 | 2 | 1 |
|-------------|--------------------|---------------|---------------|---------------|---------------|--------------------|--------------------|-------------------------|---|---|---|---|
| ITEM NUMBER | CIRCUIT SIZE ("N") | A | B | C | D | E ±.010 (±0.25) | F ±.010 (±0.25) | ADVANCED CIRCUITS | | | | |
| 71660-7501 | 68 | 1.650 (41.91) | 1.765 (44.83) | 2.149 (54.58) | 1.960 (49.78) | .134 (3.40) | .116 (2.95) | 5, 6, 39, 64, 66, 68 | | | | |
| 71660-7504 | 40 | .950 (24.13) | 1.065 (27.05) | 1.449 (36.80) | 1.260 (32.00) | .128 (3.25) | .110 (2.79) | 1, 2, 3, 18, 19, 20 | | | | |
| 71660-7505 | 50 | 1.200 (30.48) | 1.315 (33.40) | 1.699 (43.15) | 1.510 (38.35) | .128 (3.25) | .110 (2.79) | 1, 2, 3, 23, 24, 25 | | | | |
| 71660-7508 | 80 | 1.950 (49.53) | 2.065 (52.45) | 2.449 (62.20) | 2.260 (57.40) | .128 (3.25) | .110 (2.79) | 1, 36-43, 45, 46, 75-80 | | | | |



RECOMMENDED PC BOARD LAYOUT
COMPONENT SIDE
FOR 40, 68 AND 80 CIRCUIT SIZES



SECTION X-X
SCALE - 10:1
HOUSING WALLS BETWEEN TERMINALS
NOT SHOWN FOR CLARITY

.015 MINIMUM OFFSET BETWEEN
STANDARD AND ADVANCED TERMINALS

FOR 50 CIRCUIT SIZE

| | |
|----|---|
| I | ADD PART NO'S ECN UDT2002-1289 BBARKER 02/05/10 |
| H | DELETE 50 CKT UDT2001-1091 BSMART 01/04/11 |
| G1 | SEE SHEET 1 |

| | | | | | |
|--|---------------------|----------------|------------------------------|------------------------------|-----------------------------|
| DIMENSIONS SHOWN (METRIC) INCH | | ▽ = 0 | ▼ = 0 | REVISE ONLY ON CAD SYSTEM | |
| UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2° | | | | | |
| 3 PLACE | ± .010 | --- | --- | | |
| 2 PLACE | ± --- | ± 0.25 | --- | | |
| 1 PLACE | --- | ± --- | --- | | |
| DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS | | | | | |
| DRWG. BY RAN | CHK'D. BY RAN | SCALE 4: 1 | FILE NAME 57166075 302 | PART NO. SEE SHEET 1 | DRWG. NO. SDA-71660-75** |
| APPR'D. BY CAB | DATE 12 / 6 / 94 | SHEET NO. 2 | DATE 12 / 6 / 94 | MFG. SH. REV. LTR. REVISIONS | |
| TITLE SALES ASSY, EBBI 50D, VERTICAL, BLIND MATE RCPT W/ ADVANCED TERMINALS | | | | | |
| MOLEX INCORPORATED LITSE, ILL. 60532 U.S.A. | | | | | |
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71660