

PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION

Part Number: [0716617030](#)
Status: **Active**
Overview: [ebbi_50d](#)
Description: 1.27mm (.050") Pitch EBBI™ 50D Plug, Vertical, Blind Mate, 30 Circuits, 2.79mm (.110") PC Tail Length

Documents:

[3D Model](#) [Product Specification PS-71660 \(PDF\)](#)
[Drawing \(PDF\)](#) [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
 MolexKits Yes
 Overview [ebbi_50d](#)
 Product Name EBBI™

Physical

Breakaway No
 Circuits (Loaded) 30
 Circuits (maximum) 30
 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 Yes
 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) 0.110 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) 0.76
 Plating min: Termination (µin) 75
 Plating min: Termination (µm) 1.91
 Polarized to Mating Part Yes
 Polarized to PCB Yes
 Shrouded Fully

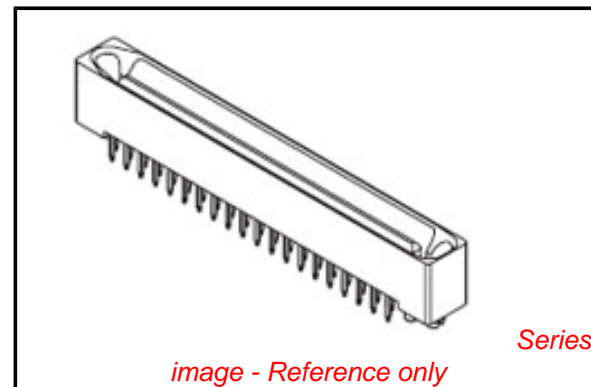


image - Reference only

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](#)

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

Duration at Max. Process Temperature (seconds)	40
Lead-free Process Capability	SMC & Wave Capable (TH only)
Max. Cycles at Max. Process Temperature	3
Process Temperature max. C	260

Material Info

Reference - Drawing Numbers

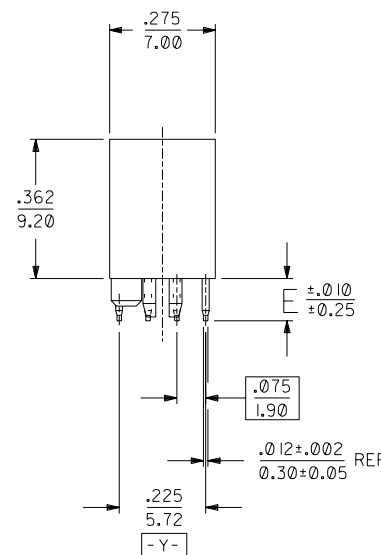
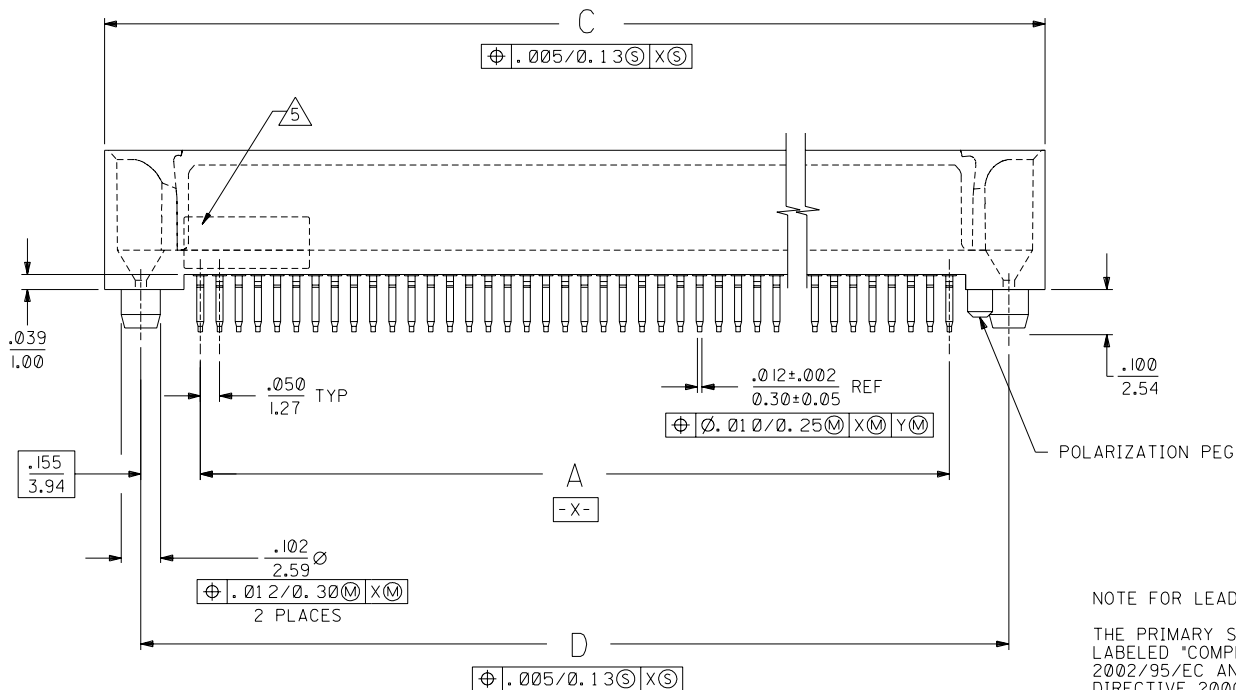
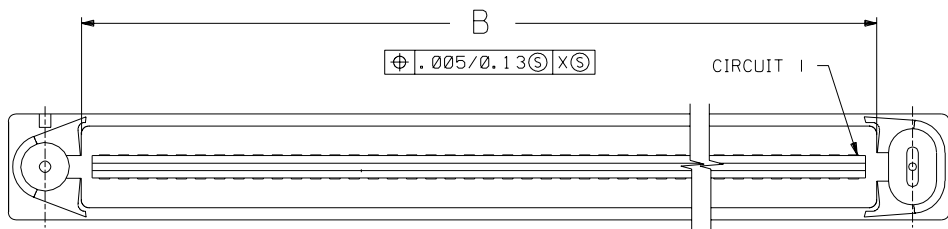
Packaging Specification	PK-71660
Product Specification	PS-71660
Sales Drawing	SDA-71661-7***

This document was generated on 06/08/2010

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NOTES:

- 1) MATERIALS:
HOUSING - LIQUID CRYSTAL POLYMER (LCP), GLASS FILLED,
UL94V-0, COLOR: BLACK
TERMINALS - COPPER 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 UNDERPLATE OVERALL.
- 3) ASSEMBLY MATES WITH MOLEX PART NUMBER 71660-7***.
CONFORMS TO PRODUCT SPECIFICATION PS-71660.
- 4) RECOMMENDED P.C. BOARD THICKNESS IS .062/1.6 MILLIMETER.
- 5) FOUR DIGIT DATE CODE TO BE LOCATED ON SURFACE
AS SHOWN.
- 6) PRODUCT PACKAGED PER SPECIFICATION PK-71660.



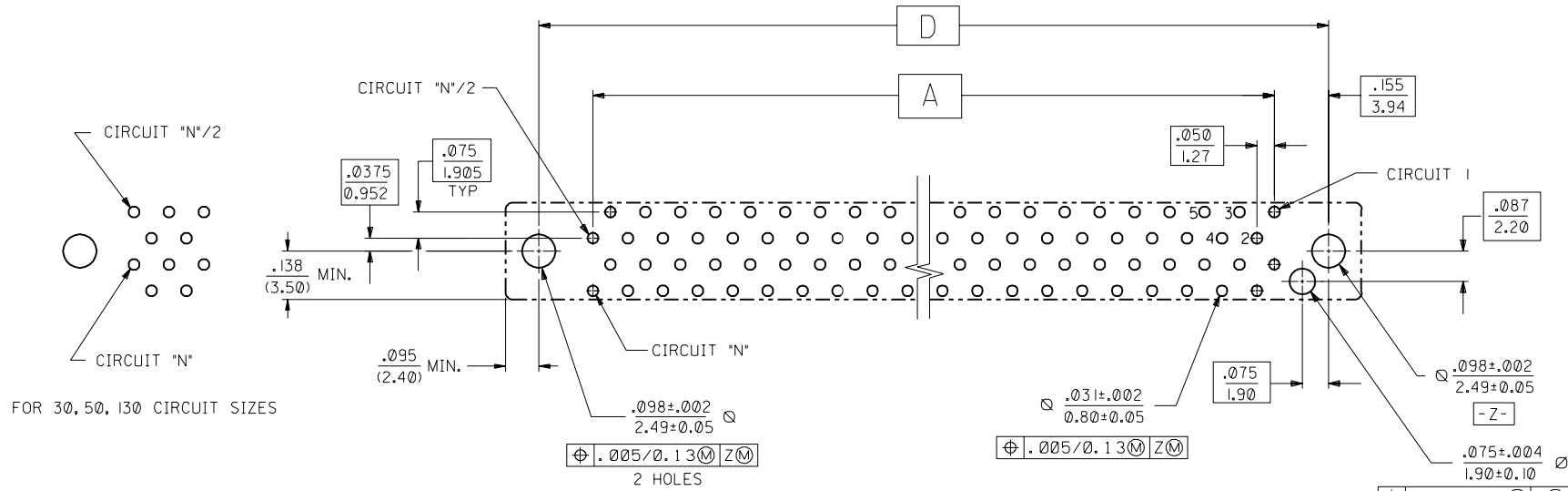
NOTE FOR LEAD FREE CONVERSION:
THE PRIMARY SHIPPING CARTON WILL BE
LABELED "COMPLIANT TO ROHS DIRECTIVE
2002/95/EC AND ELV ANNEX II OF
DIRECTIVE 2000/53/EC". CARTONS WITHOUT
THIS LABEL MAY CONTAIN PRODUCT WITH
LEAD.

L	LEAD FREE CONV ECN LCP2004-2096 RKADAMS 04/04/26
K	REVISED PER ECN U71314 ACHAMMER 97-4-28
J	REVISED PER ECN U70133 ACHAMMER 96-8-7
I	REVISED PER ECN U61477 7-3-96 DCA
H	REVISED PER ECN U61278 5-2-96 DCA
G	REVISED PER ECN U60641 11-28-95 DRS
F	REVISED PER ECN U60564 11-8-95 RAN
E	REVISED PER ECN U50229 9-23-94 RAN
D	REVISED PER ECN U50090 8-30-94 RAN
C	REVISED PER ECN U40506 4-15-94 RAN
B	REVISED PER ECN U40305 3-4-94 RAN
A	INITIAL RELEASE PER ECN U51832 12-15-93 RAN
I	PRELIMINARY 11-17-93 RAN

DIMENSIONS SHOWN (METRIC) INCH		UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°	
3 PLACE	± .005	---	---
2 PLACE	± .01	±	---
1 PLACE	---	±	---
DRAWING WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			
DRWG. BY	RAN	CHK'D. BY	RAN
APP'D. BY	CAB	SCALE	4: 1
FILE NAME 571661X7 S01		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

2	K
I	L
MFG, SH, REV, LTR, REVISIONS	
REVISE ONLY ON CAD SYSTEM	
TITLE SALES ASSEMBLY EBBI 50D, VERTICAL PLUG BLIND MATE CONNECTOR	
MOLEX LITSE,ILL.	60532
SHEET NO. 1 OF 2	DATE 11/17/93
PART NO. SEE TABLE	DRWG. NO. SDA-71661-7***
U.S.A.	SIZE C C

ITEM NUMBER	CKT ('N')	A	B	C	D	E
71661-7030	30	.700 (17.78)	.820 (20.83)	1.199 (30.45)	1.010 (25.65)	.110 (2.79)
71661-7040	40	.950 (24.13)	1.070 (27.18)	1.449 (36.80)	1.260 (32.00)	
71661-7050	50	1.200 (30.48)	1.320 (33.53)	1.699 (43.15)	1.510 (38.35)	
71661-7060	60	1.450 (36.83)	1.570 (39.88)	1.949 (49.50)	1.760 (44.70)	
71661-7068	68	1.650 (41.91)	1.770 (44.96)	2.149 (54.58)	1.960 (49.78)	
71661-7080	80	1.950 (49.53)	2.070 (52.58)	2.449 (62.20)	2.260 (57.40)	
71661-7100	100	2.450 (62.23)	2.570 (65.28)	2.949 (74.90)	2.760 (70.10)	
71661-7120	120	2.950 (74.93)	3.070 (77.98)	3.449 (87.60)	3.260 (82.80)	
71661-7130	130	3.200 (81.28)	3.320 (84.33)	3.699 (93.95)	3.510 (89.15)	
71661-7230	30	.700 (17.78)	.820 (20.83)	1.199 (30.45)	1.010 (25.65)	.134 (3.40)
71661-7240	40	.950 (24.13)	1.070 (27.18)	1.449 (36.80)	1.260 (32.00)	
71661-7250	50	1.200 (30.48)	1.320 (33.53)	1.699 (43.15)	1.510 (38.35)	
71661-7260	60	1.450 (36.83)	1.570 (39.88)	1.949 (49.50)	1.760 (44.70)	
71661-7268	68	1.650 (41.91)	1.770 (44.96)	2.149 (54.58)	1.960 (49.78)	
71661-7280	80	1.950 (49.53)	2.070 (52.58)	2.449 (62.20)	2.260 (57.40)	
71661-7300	100	2.450 (62.23)	2.570 (65.28)	2.949 (74.90)	2.760 (70.10)	
71661-7320	120	2.950 (74.93)	3.070 (77.98)	3.449 (87.60)	3.260 (82.80)	
71661-7330	130	3.200 (81.28)	3.320 (84.33)	3.699 (93.95)	3.510 (89.15)	



RECOMMENDED PC BOARD LAYOUT Δ
 COMPONENT SIDE
 FOR 40, 60, 68, 80, 100, 120 CIRCUIT SIZES

DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES ANGULAR $\pm 1/2^\circ$		MFG. SH. REV. LTR. ONLY ON CAD SYSTEM																			
<table border="1"> <thead> <tr> <th></th> <th>INCH</th> <th>METRIC</th> </tr> </thead> <tbody> <tr> <td>3 PLACE</td> <td>$\pm .005$</td> <td>---</td> </tr> <tr> <td>2 PLACE</td> <td>---</td> <td>± 0.13</td> </tr> <tr> <td>1 PLACE</td> <td>---</td> <td>\pm</td> </tr> </tbody> </table>			INCH	METRIC	3 PLACE	$\pm .005$	---	2 PLACE	---	± 0.13	1 PLACE	---	\pm	<table border="1"> <tr> <td>FILE NAME</td> <td>SHEET NO.</td> <td>DATE</td> </tr> <tr> <td>571661.DWT</td> <td>2</td> <td>11/17/93</td> </tr> </table>		FILE NAME	SHEET NO.	DATE	571661.DWT	2	11/17/93
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APP'D. BY: CAB	SCALE: 4:1	FILE NAME: 571661.DWT	DIV. C																		

K SEE SHEET 1

71661