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Part Number: [0716617040](#)
Status: **Active**
Overview: [ebbi_50d](#)
Description: 1.27mm (.050") Pitch EBBI™ 50D Plug, Vertical, Blind Mate, 40 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) 40
 Circuits (maximum) 40
 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

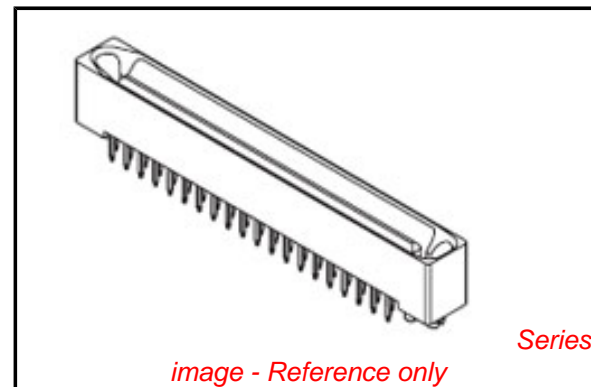


image - Reference only

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

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

Material Info**Reference - Drawing Numbers**

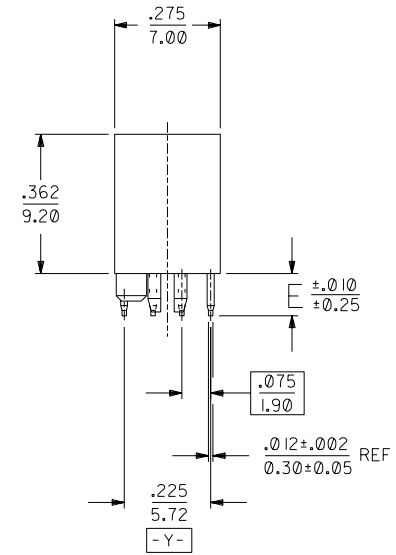
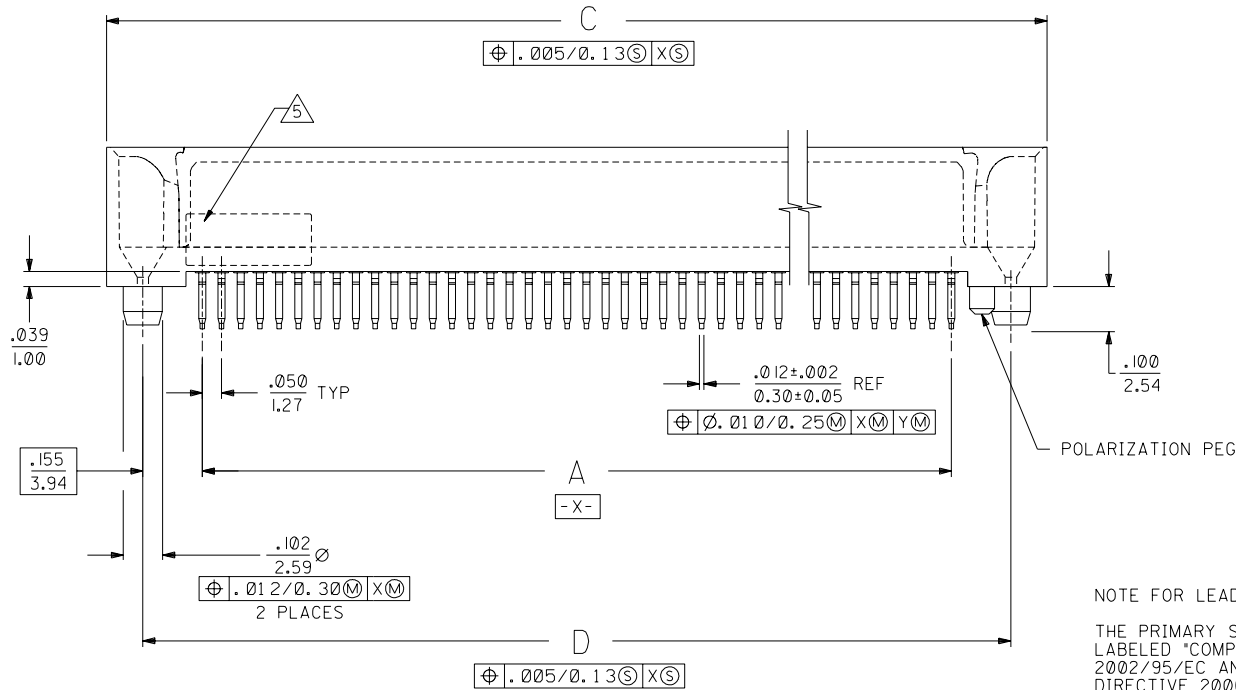
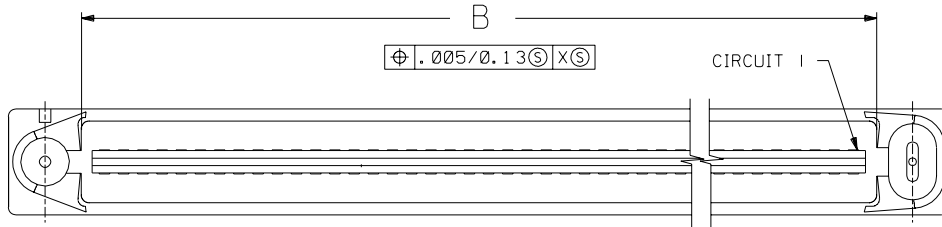
Packaging Specification	PK-71660
Product Specification	PS-71660
Sales Drawing	SDA-71661-7***

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:

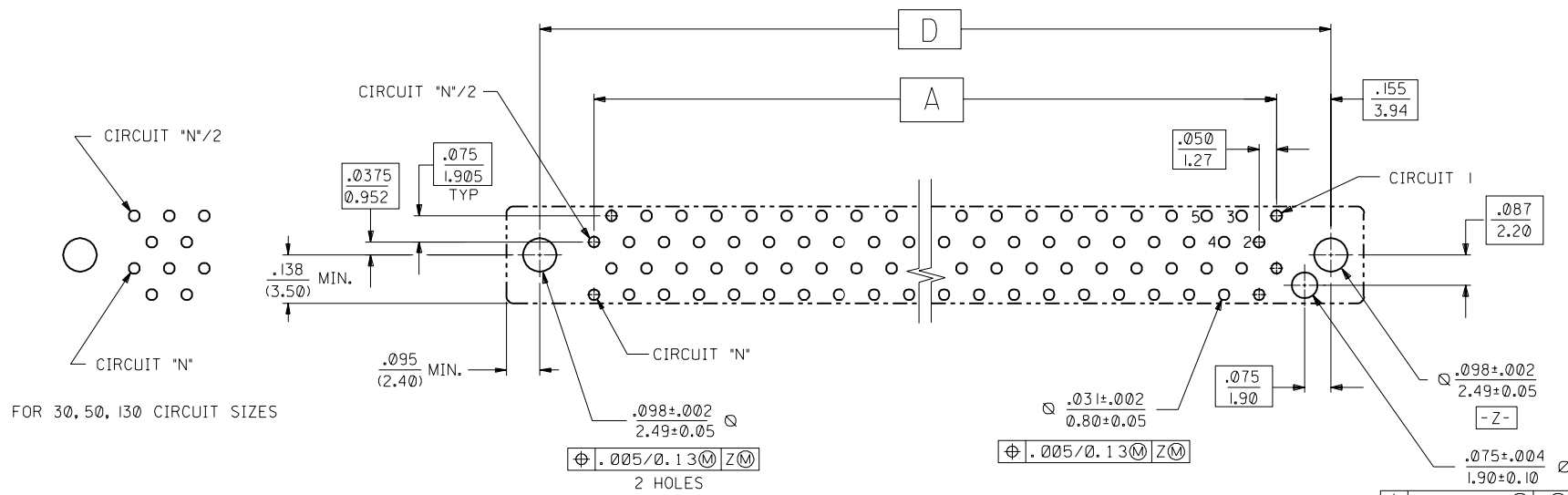
THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO ROHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH LEAD.

L	LEAD FREE CONV ECN UCP2004-2096 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

2	K			
I	L			
MFG.	SH.	REV.	LTR.	REVISIONS

DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°		▽ = 0		= 0		REVISE ONLY ON CAD SYSTEM	
INCH METRIC		TITLE		SALES ASSEMBLY EBBI 50D, VERTICAL PLUG BLIND MATE CONNECTOR			
3 PLACE ± .005	---	SEE TABLE		SDA-71661-7***		SHEET NO. DATE	
2 PLACE ± .01	±	MOLEX INCORPORATED		U.S.A.		1 OF 2 11/17/93	
1 PLACE --- ±	±	LITSE, ILL. 60532		PART NO.		DRWG. NO.	
DRAWING APPLICABLE MUST REMAIN WITHIN DIMENSIONS		FILE NAME		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		DIV. SIZE	
DRWG. BY: RAN	CHK'D. BY: RAN	571661X7		4: 1		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 \triangle
 COMPONENT SIDE
 FOR 40, 60, 68, 80, 100, 120 CIRCUIT SIZES

DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES ANGULAR ± 1/2°		▽ = 0 ▼ = 0 REVISE ONLY ON CAD SYSTEM													
<table border="1"> <thead> <tr> <th>3 PLACE</th> <th>INCH</th> <th>METRIC</th> </tr> </thead> <tbody> <tr> <td>± .005</td> <td>---</td> <td>---</td> </tr> <tr> <td>± ---</td> <td>± 0.13</td> <td>---</td> </tr> <tr> <td>---</td> <td>±</td> <td>---</td> </tr> </tbody> </table>		3 PLACE	INCH	METRIC	± .005	---	---	± ---	± 0.13	---	---	±	---	TITLE SALES ASSEMBLY EBBI 50D, VERTICAL PLUG BLIND MATE CONNECTOR	
3 PLACE	INCH	METRIC													
± .005	---	---													
± ---	± 0.13	---													
---	±	---													
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MOLEX INCORPORATED L15LEJLL 60532 U.S.A.													
PART NO. SEE TABLE		SHEET NO. 2 DATE 11/17/93													
DRAWN BY RAN CHK'D BY RAN APP'D BY CAB SCALE 4:1		DRWG. NO. SDA-71661-7*** FILE NAME 571661.DWT THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.													
		DIV. C SIZE													

K SEE SHEET I