

**PLEASE CHECK WWW.MOLEX.COM FOR LATEST PART INFORMATION**

**Part Number:** [0716617080](#)  
**Status:** **Active**  
**Overview:** [ebbi\\_50d](#)  
**Description:** 1.27mm (.050") Pitch EBBI™ 50D Plug, Vertical, Blind Mate, 80 Circuits, 2.79mm (.110") PC Tail Length

**Documents:**

[3D Model](#) [Product Specification PS-71660 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

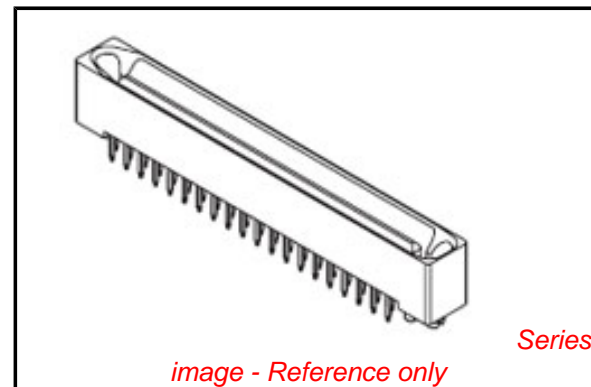
CSA LR19980  
 UL E29179

**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) 80  
 Circuits (maximum) 80  
 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



**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](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**

[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**

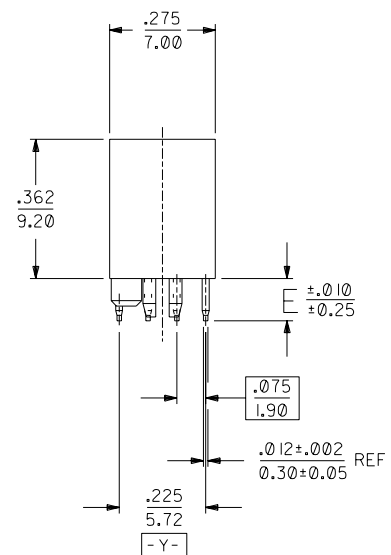
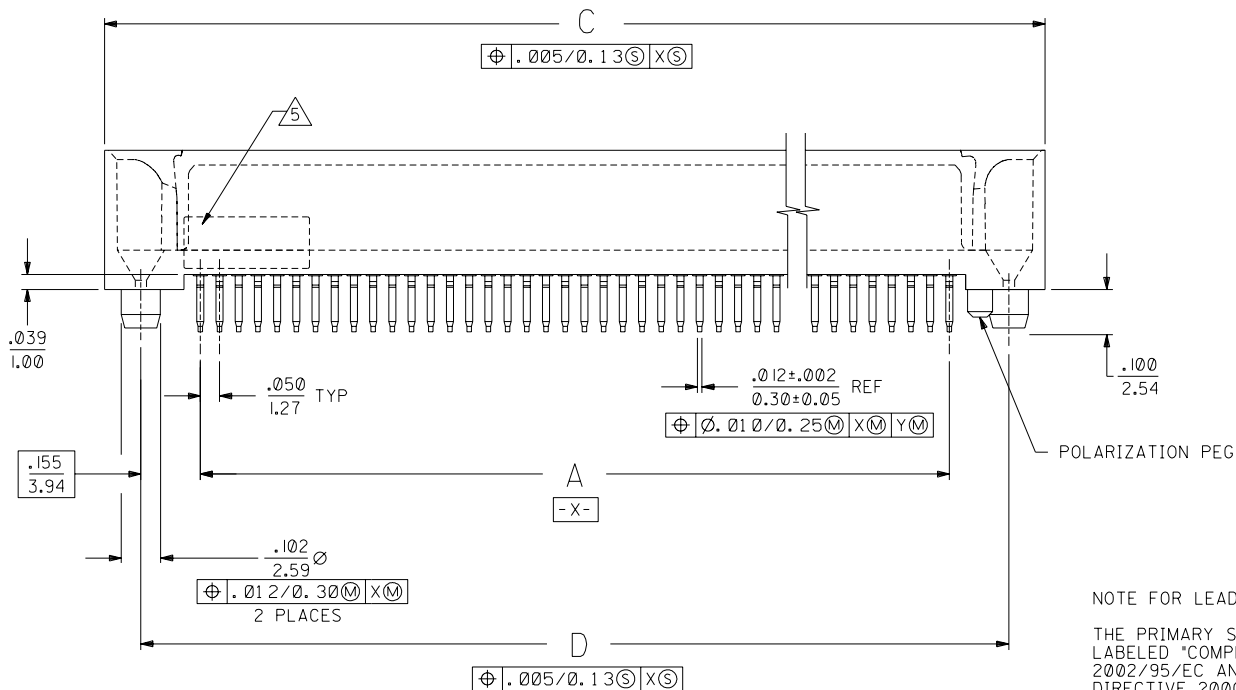
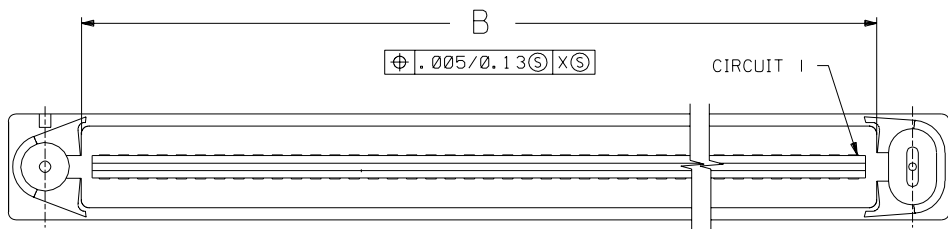
Packaging Specification	PK-71660
Product Specification	PS-71660
Sales Drawing	SDA-71661-7***

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.

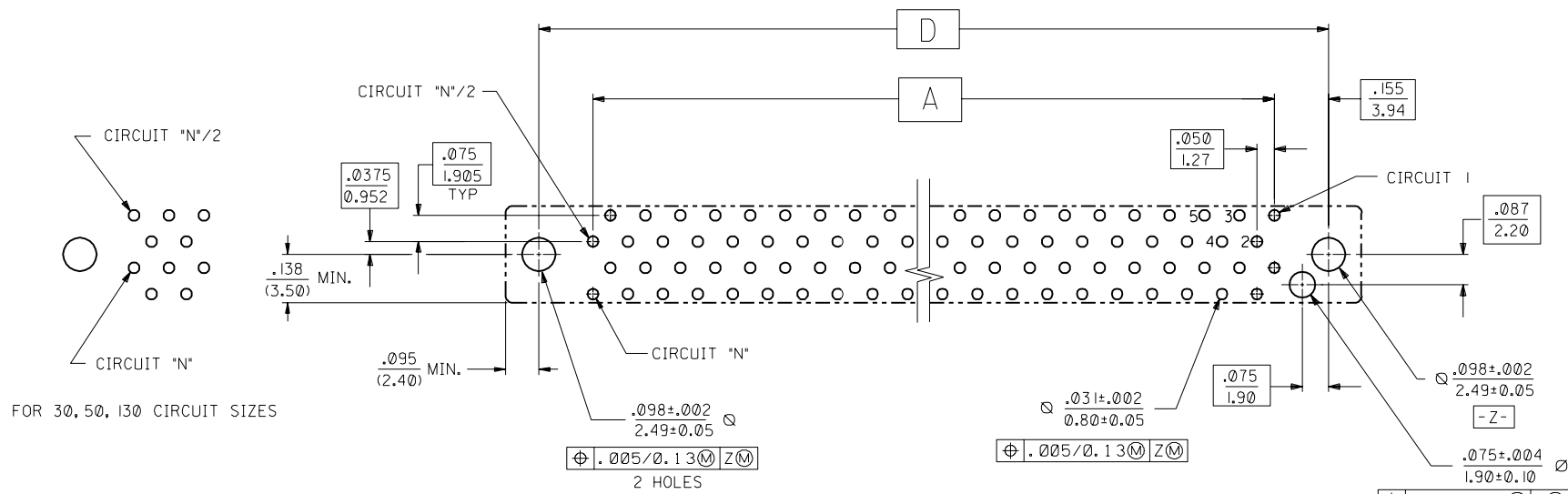
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K	REVISED PER ECN U71314 ACHAMMER 97-4-28
J	REVISED PER ECN U70133 ACHAMMER 96-8-7
I	REVISED PER ECN U61477 7-3-96 DCA
H	REVISED PER ECN U61278 5-2-96 DCA
G	REVISED PER ECN U60641 11-28-95 DRS
F	REVISED PER ECN U60564 11-8-95 RAN
E	REVISED PER ECN 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

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

DIMENSIONS SHOWN (METRIC) INCH		UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR $\pm 1/2^\circ$	
3 PLACE	$\pm .005$	INCH	METRIC
2 PLACE	$\pm .01$		
1 PLACE	---		
DRAWING WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			
DRWG. BY: RAN	CHK'D. BY: RAN	FILE NAME: 571661X7	DRWG. NO.: SDA-71661-7***
APP'D. BY: CAB	SCALE: 4:1	SHEET NO.: 1 OF 2	DATE: 11/17/93
SEE TABLE		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

TITLE: SALES ASSEMBLY  
EBBI 50D, VERTICAL PLUG  
BLIND MATE CONNECTOR  
MOLEX INCORPORATED  
LITSE, ILL. 60532  
SHEET NO. 1 OF 2  
DATE: 11/17/93  
U.S.A.

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  $\Delta$   
 COMPONENT SIDE  
 FOR 40, 60, 68, 80, 100, 120 CIRCUIT SIZES

DIMENSIONS SHOWN (METRIC) INCH		▽ = 0		= 0		REVISE ONLY ON CAD SYSTEM	
UNLESS OTHERWISE SPECIFIED TOLERANCES ANGULAR ± 1/2°		TITLE		SALES ASSEMBLY		EBSI 50D, VERTICAL PLUG	
3 PLACE ± .005		INCH		METRIC		BLIND MATE CONNECTOR	
2 PLACE ± --- ± 0.13		1 PLACE --- ±		MOLEX INCORPORATED		SHEET NO. 2	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		PART NO.		DATE		11/17/93	
DRAWN BY RAN		CHK'D BY RAN		FILE NAME		SDA-71661-7***	
APP'D BY CAB		SCALE 4:1		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		DIV. C	

MFG.	SH.	REV.	LTR.	REVISIONS
				SEE SHEET 1