

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

**Part Number:** [0716607680](#)  
**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  
 Product Name EBBI™

**Physical**

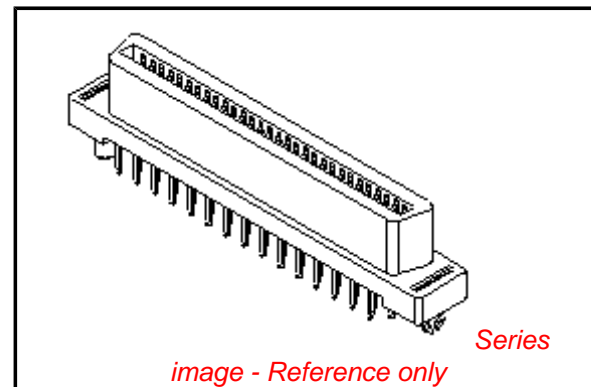
Circuits (Loaded) 80  
 Color - Resin Black  
 Durability (mating cycles max) 2,000  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Guide to Mating Part Yes  
 Lock to Mating Part None  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 2  
 Orientation Vertical  
 PC Tail Length (in) 0.155 In  
 PC Tail Length (mm) 3.94 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  
 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

**Material Info**

**Reference - Drawing Numbers**



**EU RoHS**

**ELV and RoHS  
 Compliant  
 REACH SVHC  
 Not Reviewed  
 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**

[71660Series](#)

**Mates With**

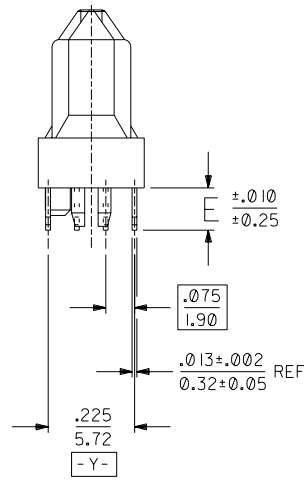
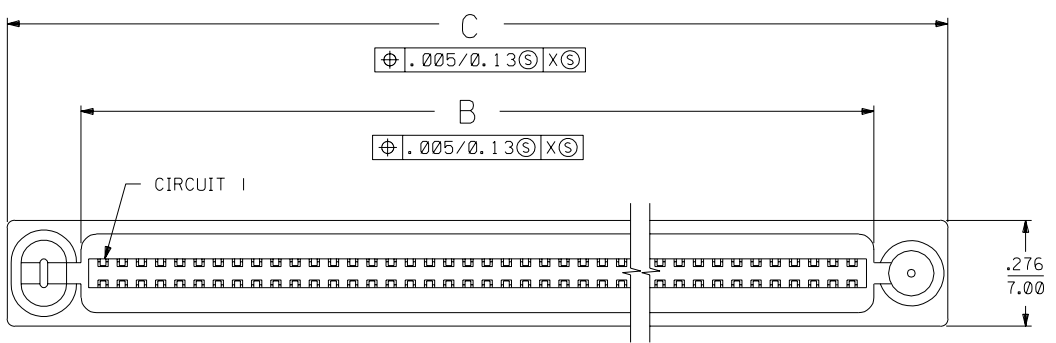
[71661](#)

This document was generated on 05/24/2010

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NOTES:

- 1) MATERIALS:  
HOUSING- LCP, GLASS FILLED, 94V-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 UNDERPLATE OVERALL.
- 3) ASSEMBLY MATES WITH MOLEX P/N SDA-71661-7\*\*\*.  
CONFORMS TO PRODUCT SPECIFICATION PS-71660.
- 4) RECOMMENDED P.C. BOARD THICKNESS IS .062/1.6 mm.
- 5) FOUR DIGIT DATE CODE TO BE LOCATED ON SURFACE AS SHOWN.



NOTE FOR LEAD FREE CONVERSION:

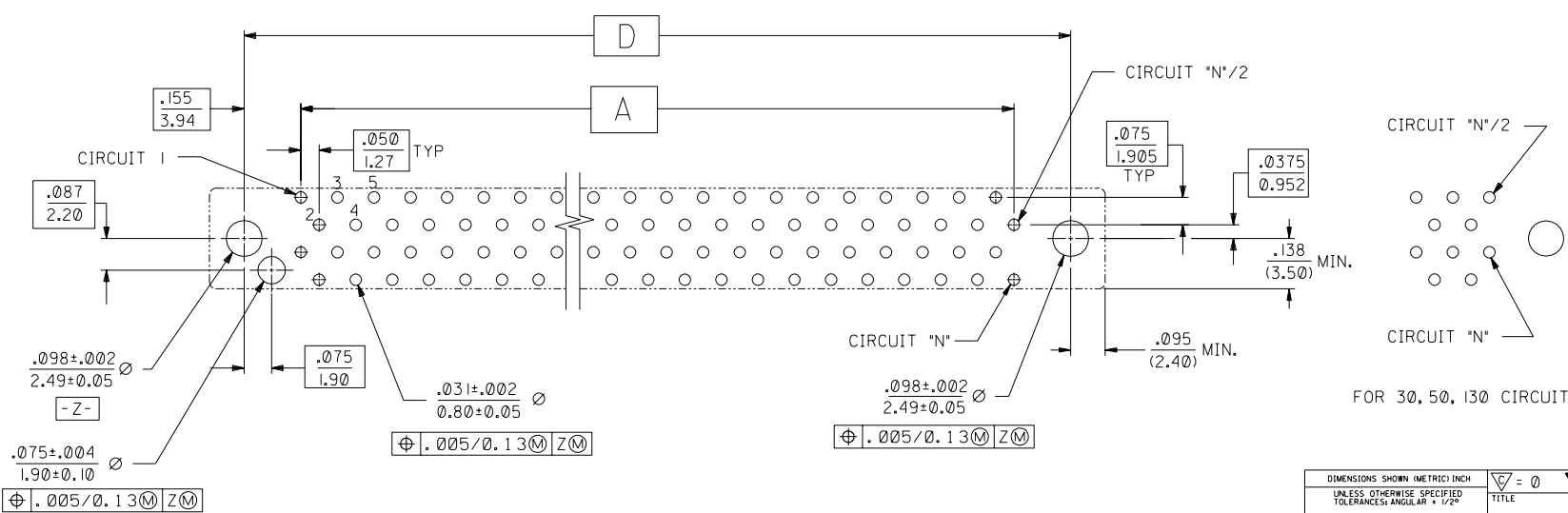
THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH LEAD.

N	ADD LONG TAIL UCP2004-1302 RWWHITE 04/07/14
M	LEAD FREE CONV ECN UCP2004-2096 RKADAMS 04/04/29
L	REVISED PER UDT 2000-1231 ACHAMMER 00/06/07
K	REVISED PER ECN U71314 ACHAMMER 97/4/25
J	REVISED PER ECN U70133 ACHAMMER 96/8/19
I	REVISED PER ECN U70090 ACHAMMER 96/7/26
H	REVISED PER ECN U61278 5-2-96 DCA
G	REVISED PER ECN U60641 11-29-95 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 U31832 12-15-93 RAN

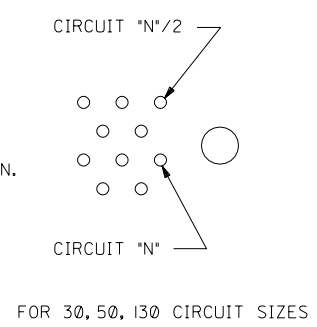
2	N		
1	N		
MFG, SH.	REV.	LTR.	REVISIONS

DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°		▽ = 0 ▼ = 0		REVISE ONLY ON CAD SYSTEM	
INCH METRIC		TITLE			
3 PLACE ± .005	---	SALES ASSEMBLY			
2 PLACE ± --- ± 0.13	---	EBBI 50D VERTICAL RCPT			
1 PLACE --- ± ---	---	BLIND MATE CONNECTOR			
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MOLEX INCORPORATED		SHEET NO. DATE	
		60532		1 OF 2 11/17/93	
DRWG. BY: RAN		CHK'D. BY: RAN		PART NO. DRWG. NO.	
APP'D. BY: CAB		SCALE: 4: 1		SEE TABLE SDA-71660-7***	
		FILE NAME: 571660X7		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	

ITEM NUMBER	CKT ('N')	A	B	C	D	E
71660-7030	30	.700 (17.78)	.815 (20.70)	1.199 (30.45)	1.010 (25.65)	.110 (2.79)
71660-7040	40	.950 (24.13)	1.065 (27.05)	1.449 (36.80)	1.260 (32.00)	
71660-7050	50	1.200 (30.48)	1.315 (33.40)	1.699 (43.15)	1.510 (38.35)	
71660-7060	60	1.450 (36.83)	1.565 (39.75)	1.949 (49.50)	1.760 (44.70)	
71660-7068	68	1.650 (41.91)	1.765 (44.83)	2.149 (54.58)	1.960 (49.78)	
71660-7080	80	1.950 (49.53)	2.065 (52.45)	2.449 (62.20)	2.260 (57.40)	
71660-7100	100	2.450 (62.23)	2.565 (65.15)	2.949 (74.90)	2.760 (70.10)	
71660-7120	120	2.950 (74.93)	3.065 (77.85)	3.449 (87.60)	3.260 (82.80)	
71660-7130	130	3.200 (81.28)	3.315 (84.20)	3.699 (93.95)	3.510 (89.15)	
71660-7230	30	.700 (17.78)	.815 (20.70)	1.199 (30.45)	1.010 (25.65)	
71660-7240	40	.950 (24.13)	1.065 (27.05)	1.449 (36.80)	1.260 (32.00)	
71660-7250	50	1.200 (30.48)	1.315 (33.40)	1.699 (43.15)	1.510 (38.35)	
71660-7260	60	1.450 (36.83)	1.565 (39.75)	1.949 (49.50)	1.760 (44.70)	
71660-7268	68	1.650 (41.91)	1.765 (44.83)	2.149 (54.58)	1.960 (49.78)	
71660-7280	80	1.950 (49.53)	2.065 (52.45)	2.449 (62.20)	2.260 (57.40)	
71660-7300	100	2.450 (62.23)	2.565 (65.15)	2.949 (74.90)	2.760 (70.10)	
71660-7320	120	2.950 (74.93)	3.065 (77.85)	3.449 (87.60)	3.260 (82.80)	
71660-7330	130	3.200 (81.28)	3.315 (84.20)	3.699 (93.95)	3.510 (89.15)	
71660-7630	30	.700 (17.78)	.815 (20.70)	1.199 (30.45)	1.010 (25.65)	.155 (3.94)
71660-7640	40	.950 (24.13)	1.065 (27.05)	1.449 (36.80)	1.260 (32.00)	
71660-7650	50	1.200 (30.48)	1.315 (33.40)	1.699 (43.15)	1.510 (38.35)	
71660-7660	60	1.450 (36.83)	1.565 (39.75)	1.949 (49.50)	1.760 (44.70)	
71660-7668	68	1.650 (41.91)	1.765 (44.83)	2.149 (54.58)	1.960 (49.78)	
71660-7680	80	1.950 (49.53)	2.065 (52.45)	2.449 (62.20)	2.260 (57.40)	
71660-7700	100	2.450 (62.23)	2.565 (65.15)	2.949 (74.90)	2.760 (70.10)	
71660-7720	120	2.950 (74.93)	3.065 (77.85)	3.449 (87.60)	3.260 (82.80)	
71660-7730	130	3.200 (81.28)	3.315 (84.20)	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°					
3 PLACE	± .005	---	---		
2 PLACE	± ---	± 0.13	---		
1 PLACE	---	± ---	---		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS					
DRWG. BY	RAN	CHK'D. BY	RAN	FILE NAME	571660BXT
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.	MOLEX INC. U.S.A.
PART NO.		DRWG. NO.		DATE	
SEE TABLE		SDA-71660-7***		11/17/93	
MFG. SH. REV. LTR.		REVISIONS			
N	SEE SHEET I				
K	SEE SHEET I				