

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

**Part Number:** [0015921120](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Pitch EBBI™ 50D Receptacle, Vertical, 120 Circuits

**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 Receptacles  
 Series [71660](#)  
 Application Board-to-Board  
 Product Name EBBI™

**Physical**

Circuits (Loaded) 120  
 Color - Resin Black  
 Durability (mating cycles max) 2,000  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Guide to Mating Part Yes  
 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) 0.134 In  
 PC Tail Length (mm) 3.40 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

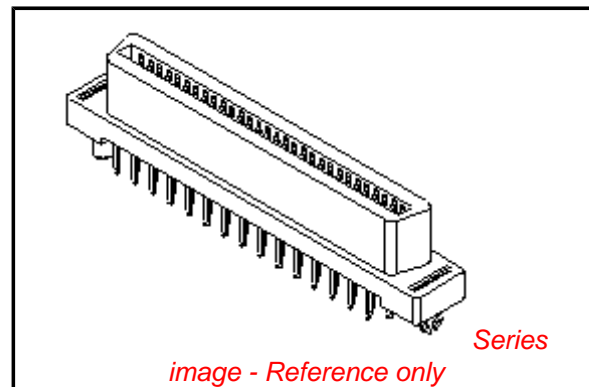
**Electrical**

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

**Material Info**



**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](#)

Old Part Number

A716601120

**Reference - Drawing Numbers**

Product Specification

PS-71660

Sales Drawing

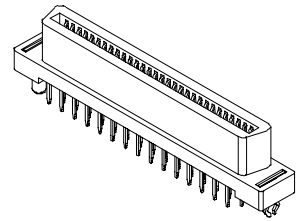
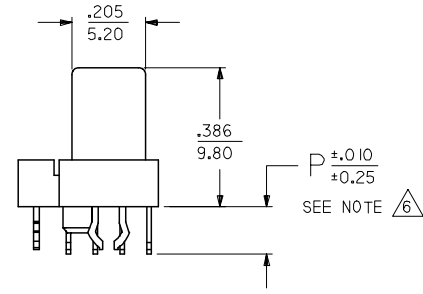
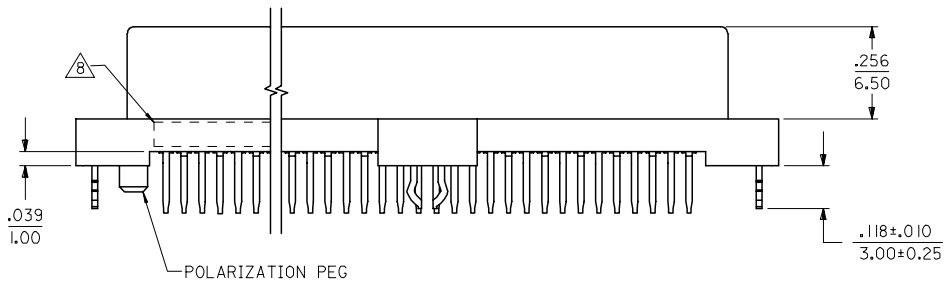
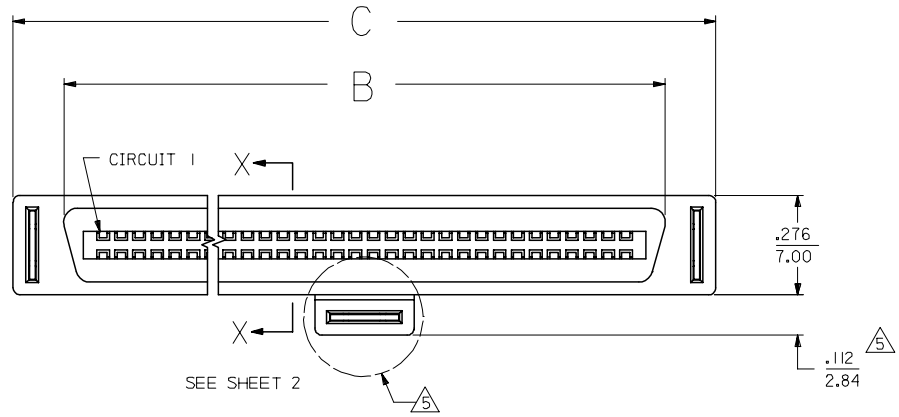
SDA-71660-1\*\*\*, SDA-71660-1\*\*\*\*

This document was generated on 04/20/2010

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NOTES:

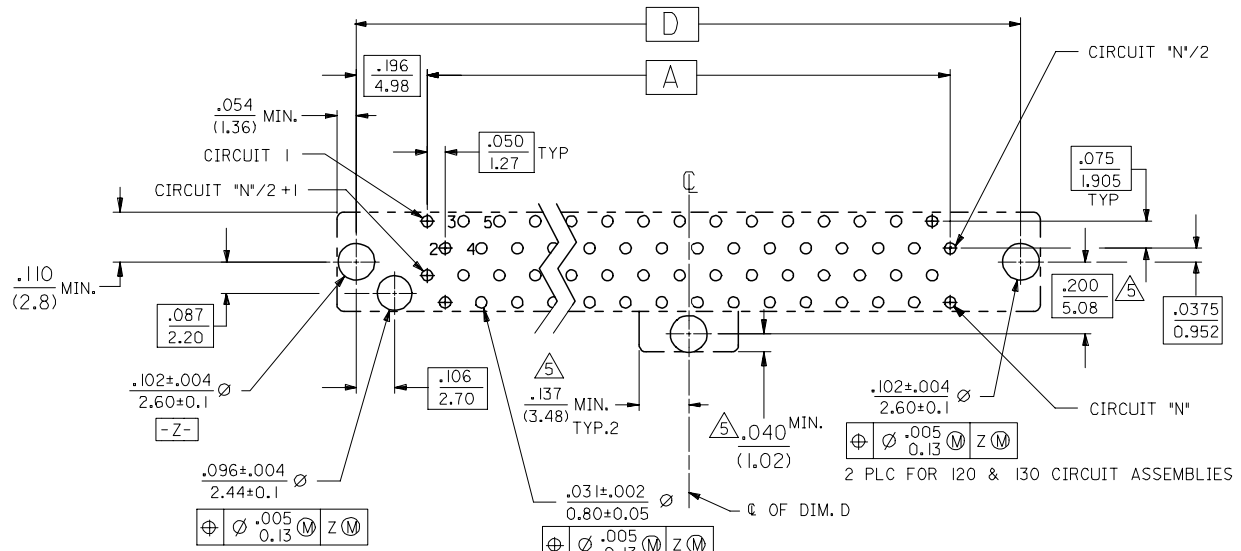
- 1) MATERIALS:  
HOUSING- LCP, GLASS FILLED, 94V-0, BLACK.  
TERMINALS- COPPER ALLOY  
METAL PEGS- COPPER ALLOY
- 2) FINISH:  
TERMINALS:  
.000030/(0.00076) MINIMUM GOLD IN CONTACT AREA OVER  
.000050/(0.00127) MINIMUM TIN IN TAIL AREA OVER  
.000075/(0.00191) MINIMUM NICKEL UNDERPLATE OVERALL.
- 3) ASSEMBLY MATES WITH MOLEX P/N SDA-71661-\*\*\*\*.
- 4) CONFORMS TO PRODUCT SPECIFICATION PS-71660.
- 5) CENTER PEG IS ONLY ON I20 AND I30 CIRCUIT ASSEMBLIES.
- 6) TAIL LENGTH ON FIRST MATE CONTACTS IS APPROXIMATELY .010 INCH/0.25 MM SHORTER THAN THE TAIL LENGTH SPECIFIED.
- 7) CONNECTOR WILL ACCEPT MATING TO A P.C. BOARD WITH A THICKNESS OF .062±.003.
- 8) FOUR DIGIT DATE CODE (WK YR), EXAMPLE => 26 96 LOCATED IN AREA INDICATED.
- 9) SEE CHART FOR PACKAGING INFORMATION.



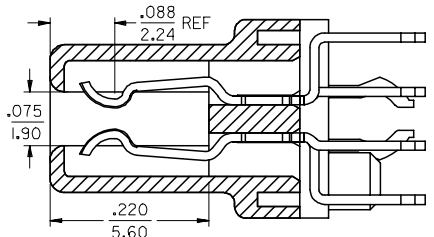
60 CIRCUIT ASSEMBLY SHOWN  
SCALE 2:1

3	0
2	0
1	0
SHT	REV

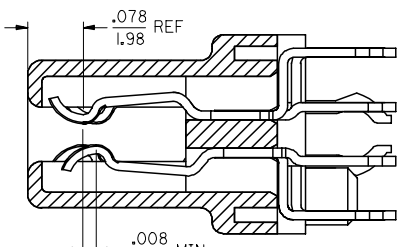
UPDATE BORDER FC NO: UCP2007-0935 DRAWN BY: BARKER 2006/11/06 CHKD: MIBARRA 2006/11/06 APPR: SMILLER 2006/11/07	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION																	
		<table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± .005</td> <td>± .0005</td> </tr> <tr> <td>3 PLACES</td> <td>± .010</td> <td>± .0010</td> </tr> <tr> <td>2 PLACES</td> <td>± .015</td> <td>± .0015</td> </tr> <tr> <td>1 PLACE</td> <td>± .025</td> <td>± .0025</td> </tr> </table>			mm	INCH	4 PLACES	± .005	± .0005	3 PLACES	± .010	± .0010	2 PLACES	± .015	± .0015	1 PLACE	± .025	± .0025	DRAWN BY RAN		DATE 6/15/92	TITLE SALES ASSEMBLY MOLEX EBBI 50D VERTICAL RECEPTACLE CONNECTOR			
			mm	INCH																					
		4 PLACES	± .005	± .0005																					
3 PLACES	± .010	± .0010																							
2 PLACES	± .015	± .0015																							
1 PLACE	± .025	± .0025																							
ANGULAR ±1/2°		CHECKED BY RAN		DATE 6/15/92	APPROVED BY CAB																				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.		DATE 6/15/92		DOCUMENT NO.		SHEET NO. 1 OF 3																	



(FOR 40, 60, 68, 80, 100, 120 CIRCUITS ONLY)



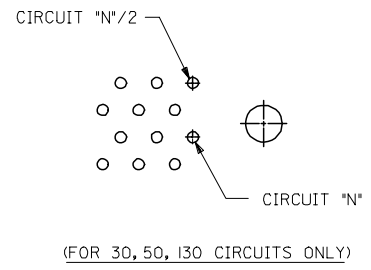
STANDARD PRODUCT



FMLB OPTION

SECTION X-X  
SCALE - 8:1

RECOMMENDED PC BOARD LAYOUT  
COMPONENT SIDE



UPDATE BORDER FC NO: UCP2007-0935 DRWN: BARKER 2006/11/06 CHKD: MIBARRA 2006/11/06 APPR: SMILLER 2006/11/07	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION			
		4 PLACES ± --- ± ---	3 PLACES ± --- ± .005	DRAWN BY RAN	DATE 6/15/92	TITLE SALES ASSEMBLY MOLEX EBBI 50D VERTICAL RECEPTACLE					
		2 PLACES ± 0.13 ± .010	1 PLACE ± 0.25 ± ---	CHECKED BY RAN	DATE 6/15/92	MOLEX INCORPORATED					
		ANGULAR ±1/2°		APPROVED BY CAB	DATE 6/15/92	MATERIAL NO. SEE CHART		DOCUMENT NO. SDA-71660-1***	SHEET NO. 2 OF 3		
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SIZE C		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

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ENGINEERING NUMBER	EDP NUMBER	PACKAGING SPEC	CKT (*N*)	A	B	C	D	P	ADVANCED TERMINALS / CKTS SEE SECTION X-X *FMLB OPT*
SDA-71660-1030	015-92-1030	PK-71660	30	.700 (17.78)	.918 (23.32)	1.199 (30.45)	1.092 (27.75)	.134 (3.40)	N/A
SDA-71660-1040	015-92-1040	PK-71660	40	.950 (24.13)	1.168 (29.67)	1.449 (36.80)	1.342 (34.10)		
SDA-71660-1050	015-92-1050	PK-71660	50	1.200 (30.48)	1.418 (36.02)	1.699 (43.15)	1.592 (40.45)		
SDA-71660-1060	015-92-1060	PK-71660	60	1.450 (36.83)	1.668 (42.37)	1.949 (49.50)	1.842 (46.80)		
SDA-71660-1068	015-92-1068	PK-71660	68	1.650 (41.91)	1.868 (47.45)	2.149 (54.58)	2.042 (51.88)		
SDA-71660-1080	015-92-1080	PK-71660	80	1.950 (49.53)	2.168 (55.07)	2.449 (62.20)	2.342 (59.50)		
SDA-71660-1100	015-92-1100	PK-71660	100	2.450 (62.23)	2.668 (67.77)	2.949 (74.90)	2.842 (72.20)		
SDA-71660-1120	015-92-1120	PK-71660	120	2.950 (74.93)	3.168 (80.47)	3.449 (87.60)	3.342 (84.90)		
SDA-71660-1130	015-92-1130	PK-71660	130	3.200 (81.28)	3.418 (86.82)	3.699 (93.95)	3.592 (91.25)		
SDA-71660-1330	015-92-1430	PK-71660	30	.700 (17.78)	.918 (23.32)	1.199 (30.45)	1.092 (27.75)	.110 (2.79)	N/A
SDA-71660-1340	015-92-1440	PK-71660	40	.950 (24.13)	1.168 (29.67)	1.449 (36.80)	1.342 (34.10)		
SDA-71660-1350	015-92-1450	PK-71660	50	1.200 (30.48)	1.418 (36.02)	1.699 (43.15)	1.592 (40.45)		
SDA-71660-1360	015-92-1460	PK-71660	60	1.450 (36.83)	1.668 (42.37)	1.949 (49.50)	1.842 (46.80)		
SDA-71660-1368	015-92-1468	PK-71660	68	1.650 (41.91)	1.868 (47.45)	2.149 (54.58)	2.042 (51.88)		
SDA-71660-1380	015-92-1480	PK-71660	80	1.950 (49.53)	2.168 (55.07)	2.449 (62.20)	2.342 (59.50)		
SDA-71660-1400	015-92-1500	PK-71660	100	2.450 (62.23)	2.668 (67.77)	2.949 (74.90)	2.842 (72.20)		
SDA-71660-1401	015-92-1501	PK-70873-0816	100	2.450 (62.23)	2.668 (67.77)	2.949 (74.90)	2.842 (72.20)		
SDA-71660-1420	015-92-1520	PK-71660	120	2.950 (74.93)	3.168 (80.47)	3.449 (87.60)	3.342 (84.90)		
SDA-71660-1430	015-92-1530	PK-71660	130	3.200 (81.28)	3.418 (86.82)	3.699 (93.95)	3.592 (91.25)		
SDA-71660-1550	015-92-1550	PK-71660	50	1.200 (30.48)	1.418 (36.02)	1.699 (43.15)	1.592 (40.45)	.134 (3.40)	2-4, 8-11, 14, 17, 20, 23, 26-29, 31, 32, 34, 36, 39, 42, 45, 48, 49
SDA-71660-1630	716601630	PK-71660	30	.700 (17.78)	.918 (23.32)	1.199 (30.45)	1.092 (27.75)	.155 (3.94)	N/A
SDA-71660-1640	716601640	PK-71660	40	.950 (24.13)	1.168 (29.67)	1.449 (36.80)	1.342 (34.10)		
SDA-71660-1650	716601650	PK-71660	50	1.200 (30.48)	1.418 (36.02)	1.699 (43.15)	1.592 (40.45)		
SDA-71660-1660	716601660	PK-71660	60	1.450 (36.83)	1.668 (42.37)	1.949 (49.50)	1.842 (46.80)		
SDA-71660-1668	716601668	PK-71660	68	1.650 (41.91)	1.868 (47.45)	2.149 (54.58)	2.042 (51.88)		
SDA-71660-1680	716601680	PK-71660	80	1.950 (49.53)	2.168 (55.07)	2.449 (62.20)	2.342 (59.50)		
SDA-71660-1700	716601700	PK-71660	100	2.450 (62.23)	2.668 (67.77)	2.949 (74.90)	2.842 (72.20)		
SDA-71660-1720	716601720	PK-71660	120	2.950 (74.93)	3.168 (80.47)	3.449 (87.60)	3.342 (84.90)		
SDA-71660-1730	716601730	PK-71660	130	3.200 (81.28)	3.418 (86.82)	3.699 (93.95)	3.592 (91.25)		

UPDATE BORDER EC NO: UCP2007-0935 O DRAWN: BARKER 2006/11/06 CHKD: 2006/11/06 APPR: SMILLER 2006/11/07 REVISIONS DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	▽=0 ▽=0	mm      INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ± .005 2 PLACES ± 0.13 ± .010 1 PLACE ± 0.25 ± --- ANGULAR ±1/2°	IN/MM	4:1	INCH	☉ □ THIRD ANGLE PROJECTION
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	DRAWN BY      DATE RAN              6/15/92 CHECKED BY    DATE RAN              6/15/92 APPROVED BY    DATE CAB              6/15/92	SALES ASSEMBLY MOLEX EBBI 50D VERTICAL RECEPTACLE		
			MATERIAL NO. SEE CHART SIZE C	MOLEX INCORPORATED SDA-71660-1****		SHEET NO. 3 OF 3