

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

**Part Number:** [0015922120](#)  
**Status:** **Active**  
**Overview:** [ebbi\\_50d](#)  
**Description:** 1.27mm (.050") Pitch EBBI™ 50D Plug, Vertical, without Latch, 120 Circuits, 3.40mm (.134") PC Tail Length

**Documents:**

[3D Model](#) [RoHS Certificate of Compliance \(PDF\)](#)  
[Drawing \(PDF\)](#)

**Agency Certification**

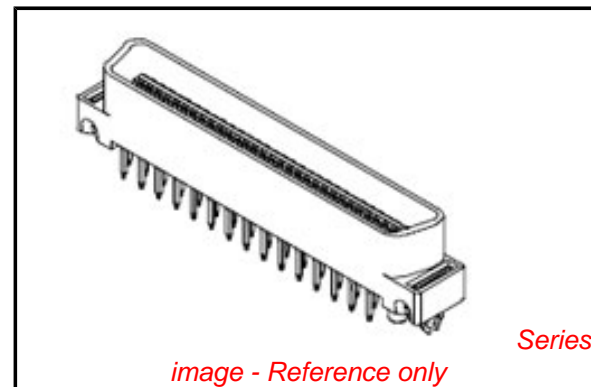
CSA LR19980  
 UL E29179

**General**

Product Family PCB Headers  
 Series [71661](#)  
 Application Board-to-Board, Wire-to-Board  
 Overview [ebbi\\_50d](#)  
 Product Name EBBI™

**Physical**

Breakaway No  
 Circuits (Loaded) 120  
 Circuits (maximum) 120  
 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 No  
 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) 0.134 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  
 Pitch - Term. Interface (in) 0.050 In  
 Pitch - Term. 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



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC**  
 Not Reviewed  
**Halogen-Free Status**  
 Not Reviewed

**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](#) , [87552](#)

Shrouded	Fully
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**

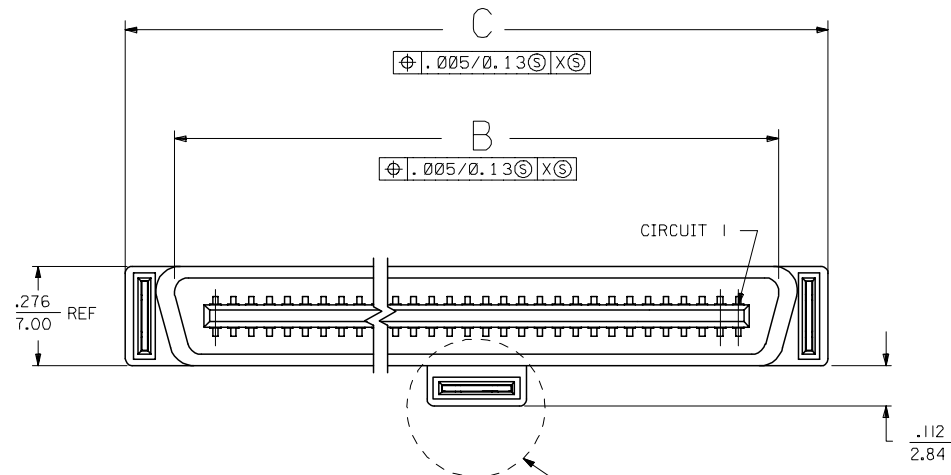
Old Part Number	A716611120
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**Reference - Drawing Numbers**

Packaging Specification	PK-71660
Sales Drawing	SDA-71661-1***

This document was generated on 05/26/2010

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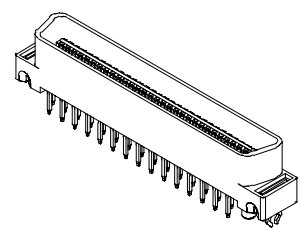
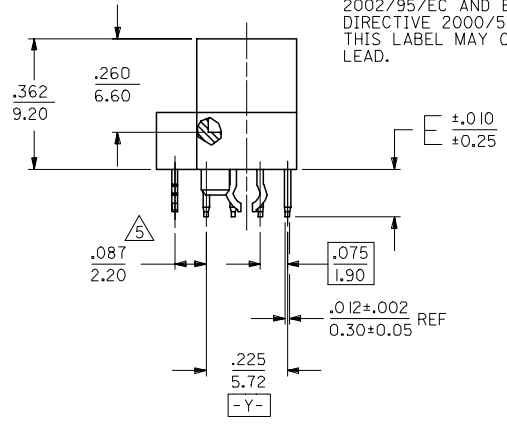
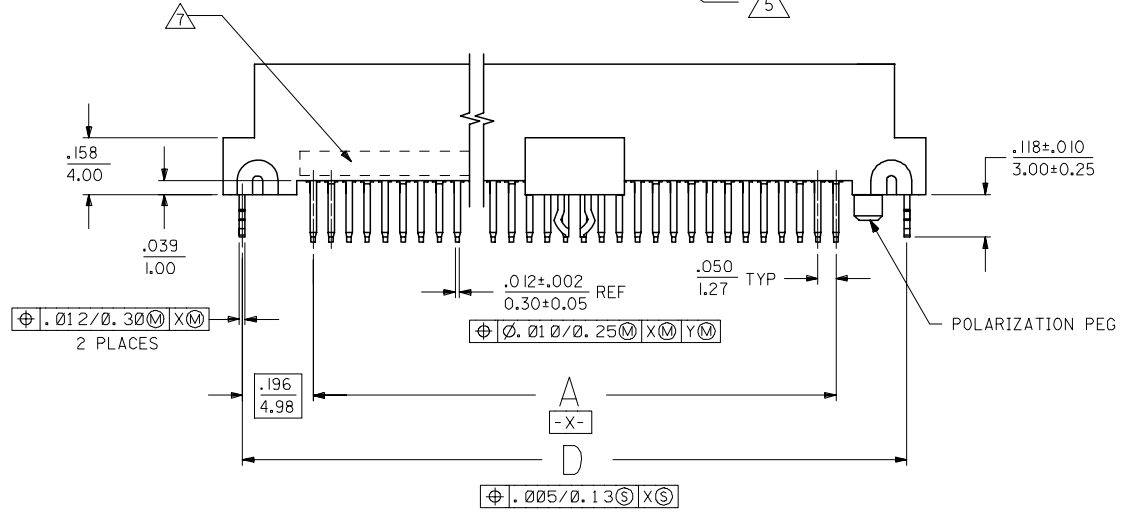


**NOTES:**

- 1) MATERIALS:  
HOUSING - LIQUID CRYSTAL POLYMER (LCP), GLASS FILLED, UL94V-0, COLOR: BLACK  
TERMINALS - COPPPER ALLOY  
METAL PEGS - COPPPER 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 UNDERPLATING OVERALL.
- 3) ASSEMBLY MATES WITH MOLEX P/N SDA-71660-\*\*\*\*.
- 4) CONFORMS TO PRODUCT SPECIFICATION PS-71660.
- 5) CENTER PEG IS ONLY ON I20 AND I30 CIRCUIT ASSEMBLIES.
- 6) RECOMMENDED P.C. BOARD THICKNESS IS .062 (1.6).
- 7) FOUR DIGIT DATE CODE (WK YR), EXAMPLE => 26 96 LOCATED IN AREA INDICATED.
- 8) SEE CHART ON SHEET 2 FOR PACKAGING INFORMATION.

**NOTE FOR LEAD FREE CONVERSION:**

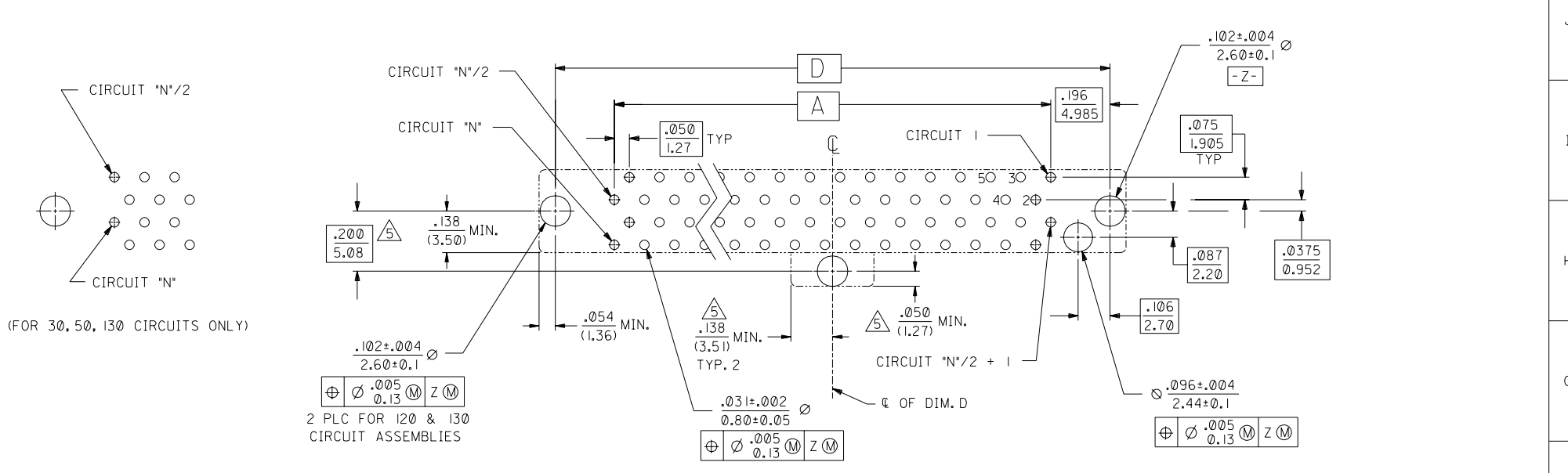
THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO RoHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH LEAD.



60 CIRCUIT ASSEMBLY SHOWN  
SCALE- 2:1

CHG TERMINAL MATL FC NO: UCP2005-0775 DRAWN: BARKER 2005/06/13 CHKD: MORGAN 2005/06/13 APPR: SMILLER 2005/06/23	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE 1:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
		4 PLACES ± --- ± --- 3 PLACES ± --- ± .005 2 PLACES ± 0.13 ± .010 1 PLACE ± 0.25 ± --- ANGULAR ±1/2°	mm INCH DRAWN BY DATE RAN 1992/06/15 CHECKED BY DATE RAN 1992/06/15 APPROVED BY DATE CAB 1992/06/15	TITLE SALES ASSEMBLY MOLEX EBBI 50D VERTICAL PLUG CONNECTOR		MATERIAL NO. SEE TABLE	DOCUMENT NO. SDA-71661-1***	SHEET NO. 1 OF 2
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION						

2	K
1	M
SHT	REV



RECOMMENDED PC BOARD LAYOUT COMPONENT SIDE  
(FOR 40, 60, 68, 80, 100, 120 CIRCUITS ONLY)

71661-1430	015-92-2530	130	3.200 (81.28)	3.426 (87.02)	3.699 (93.95)	3.592 (91.25)	.110 (2.79)	TRAYS PER PK-71660
71661-1420	015-92-2520	120	2.950 (74.93)	3.176 (80.67)	3.449 (87.60)	3.342 (84.90)	.110 (2.79)	TRAYS PER PK-71660
71661-1400	015-92-2500	100	2.450 (62.23)	2.676 (67.97)	2.949 (74.90)	2.842 (72.20)	.110 (2.79)	TRAYS PER PK-71660
71661-1381	015-92-2481	80	1.950 (49.53)	2.176 (55.27)	2.449 (62.20)	2.342 (59.50)	.110 (2.79)	TUBES PER PK-70873-0817
71661-1380	015-92-2480	80	1.950 (49.53)	2.176 (55.27)	2.449 (62.20)	2.342 (59.50)	.110 (2.79)	TRAYS PER PK-71660
71661-1368	015-92-2468	68	1.650 (41.91)	1.875 (47.65)	2.149 (54.58)	2.042 (51.88)	.110 (2.79)	TRAYS PER PK-71660
71661-1360	015-92-2460	60	1.450 (36.83)	1.676 (42.57)	1.949 (49.50)	1.842 (46.80)	.110 (2.79)	TRAYS PER PK-71660
71661-1350	015-92-2450	50	1.200 (30.48)	1.426 (36.22)	1.699 (43.15)	1.592 (40.45)	.110 (2.79)	TRAYS PER PK-71660
71661-1340	015-92-2440	40	.950 (24.13)	1.176 (29.87)	1.449 (36.80)	1.342 (34.10)	.110 (2.79)	TRAYS PER PK-71660
71661-1330	015-92-2430	30	.700 (17.78)	.925 (23.52)	1.199 (30.45)	1.092 (27.75)	.110 (2.79)	TRAYS PER PK-71660
71661-1130	015-92-2130	130	3.200 (81.28)	3.426 (87.02)	3.699 (93.95)	3.592 (91.25)	.134 (3.40)	TRAYS PER PK-71660
71661-1120	015-92-2120	120	2.950 (74.93)	3.176 (80.67)	3.449 (87.60)	3.342 (84.90)	.134 (3.40)	TRAYS PER PK-71660
71661-1100	015-92-2100	100	2.450 (62.23)	2.676 (67.97)	2.949 (74.90)	2.842 (72.20)	.134 (3.40)	TRAYS PER PK-71660
71661-1080	015-92-2080	80	1.950 (49.53)	2.176 (55.27)	2.449 (62.20)	2.342 (59.50)	.134 (3.40)	TRAYS PER PK-71660
71661-1068	015-92-2068	68	1.650 (41.91)	1.875 (47.65)	2.149 (54.58)	2.042 (51.88)	.134 (3.40)	TRAYS PER PK-71660
71661-1060	015-92-2060	60	1.450 (36.83)	1.676 (42.57)	1.949 (49.50)	1.842 (46.80)	.134 (3.40)	TRAYS PER PK-71660
71661-1050	015-92-2050	50	1.200 (30.48)	1.426 (36.22)	1.699 (43.15)	1.592 (40.45)	.134 (3.40)	TRAYS PER PK-71660
71661-1040	015-92-2040	40	.950 (24.13)	1.176 (29.87)	1.449 (36.80)	1.342 (34.10)	.134 (3.40)	TRAYS PER PK-71660
71661-1030	015-92-2030	30	.700 (17.78)	.925 (23.52)	1.199 (30.45)	1.092 (27.75)	.134 (3.40)	TRAYS PER PK-71660
ENGINEERING NUMBER	EDP NUMBER	CIRCUIT SIZE ("N")	A	B	C	D	E	PACKAGING

DIMENSIONS SHOWN (METRIC) INCH		UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°	
3 PLACE	± .005	---	---
2 PLACE	± .01	± 0.13	---
1 PLACE	---	± 0.25	---
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			
DRWG. BY: RAN	CHK'D. BY: RAN	SCALE: 4: 1	
APP'D. BY: CAB			
MFG. SH. REV. LTR. REVISIONS		REVISE ONLY ON CAD SYSTEM	
TITLE: SALES ASSEMBLY MOLEX EBBI 50D VERTICAL PLUG CONNECTOR		SHEET NO. 2 DATE 6/15/92	
PART NO. SEE TABLE		DRWG. NO. SDA-71661-1***	
FILE NAME: S71661X1.S02		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION	