

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

**Part Number:** [0716612568](#)  
**Status:** **Active**  
**Overview:** [ebbi\\_50d](#)  
**Description:** 1.27mm (.050") Pitch EBBI™ 50D Plug, Right Angle, Blind-Mate, 68 Circuits, 2.79mm (.110") PC Tail Length

**Documents:**

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

**Agency Certification**

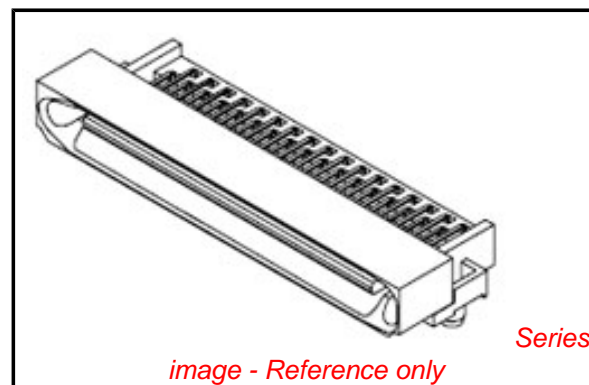
CSA LR19980  
 UL E29179

**General**

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

**Physical**

Breakaway No  
 Circuits (Loaded) 68  
 Circuits (maximum) 68  
 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 Brass  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 2  
 Orientation Right Angle  
 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  
 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) 50  
 Plating min: Termination (µm) 1.30  
 Polarized to Mating Part Yes  
 Polarized to PCB Yes



**EU RoHS**

**ELV and RoHS Compliant**  
**REACH SVHC Contains SVHC: No**  
**Halogen-Free Status**  
**Halogen-Free**

**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](#) , [87537](#)

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	235

#### **Material Info**

#### **Reference - Drawing Numbers**

Packaging Specification	PK-70873-084*
Product Specification	PS-71660
Sales Drawing	SDA-71661-25**

This document was generated on 05/31/2010

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NOTES:

1. MATERIAL:

HOUSING: LIQUID CRYSTAL POLYMER (LCP), GLASS-FILLED, UL94V-0,  
COLOR: BLACK

TERMINALS: BRASS

2. FINISH:

TERMINAL: 0.76 MICROMETERS/30 MICROINCHES MINIMUM SELECTIVE GOLD  
IN CONTACT AREA; 1.27 MICROMETERS/50 MICROINCHES MINIMUM  
SELECTIVE TIN IN THE PC TAIL AREA; NICKEL UNDERPLATE OVERALL.

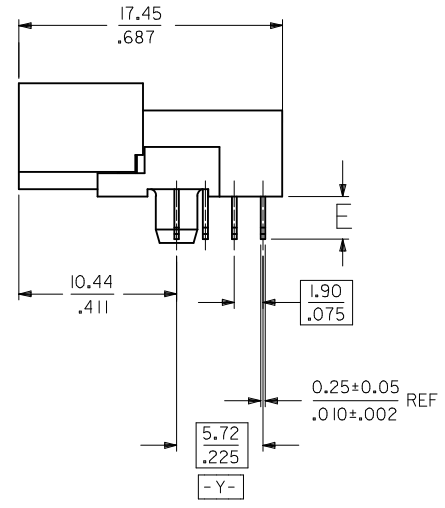
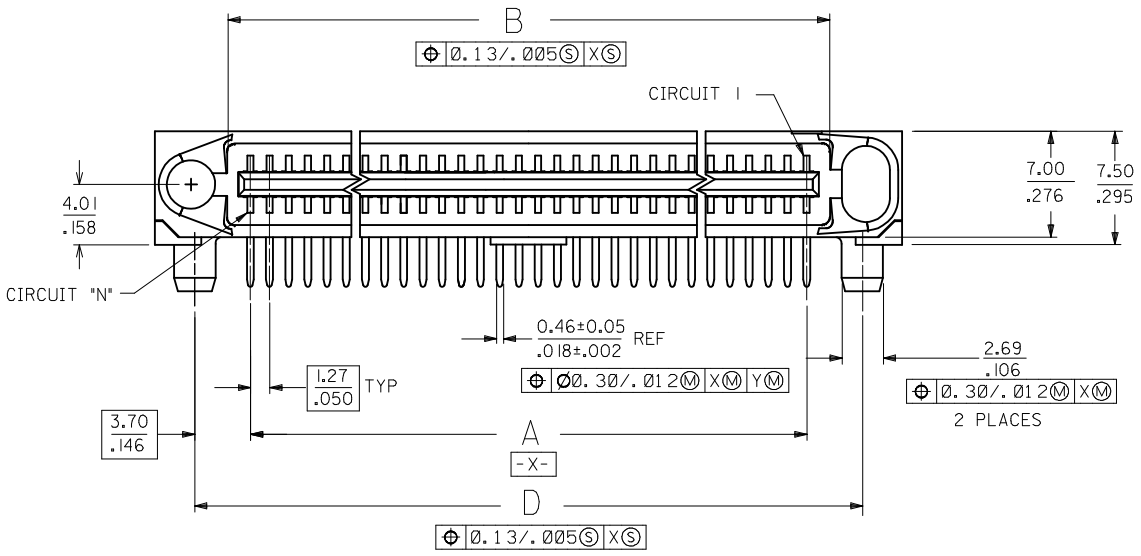
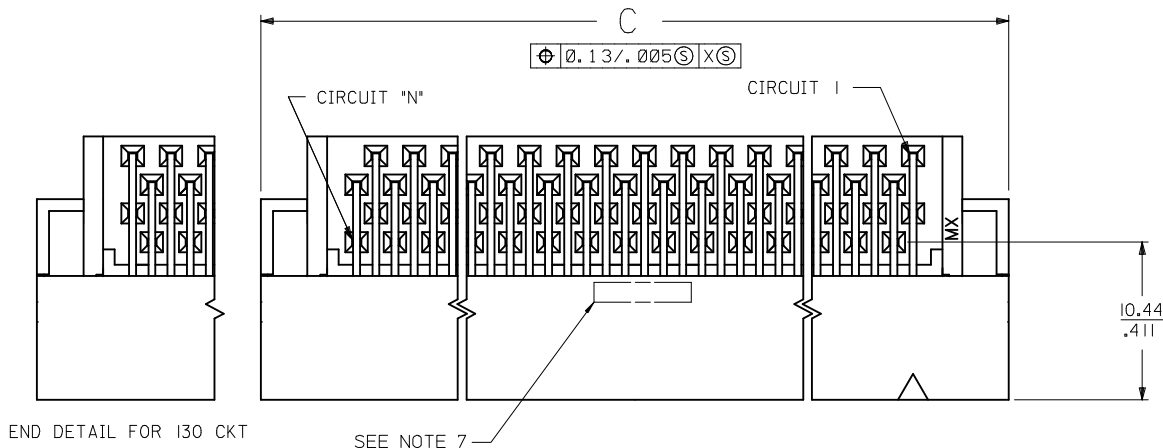
3. CONFORMS TO PRODUCT SPEC: PS-71660

4. PRODUCT PACKAGED PER PK-70873-084\*

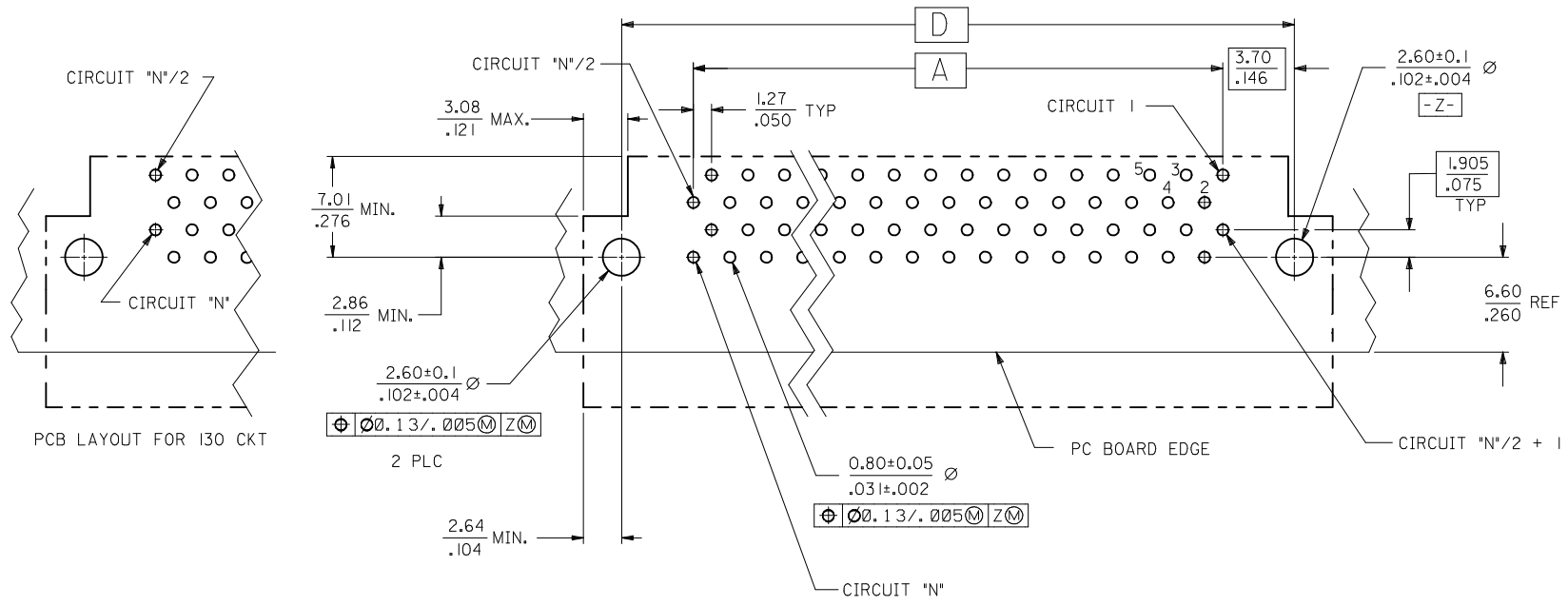
5. ASSEMBLY MATES WITH MOLEX P/N SDA-71660-7\*\*\*

6. RECOMMENDED PC BOARD THICKNESS IS 1.6 MM/0.062 IN

7. FOUR DIGIT DATE CODE (WK.YR) EXAMPLE 26 96 LOCATED IN AREA SHOWN

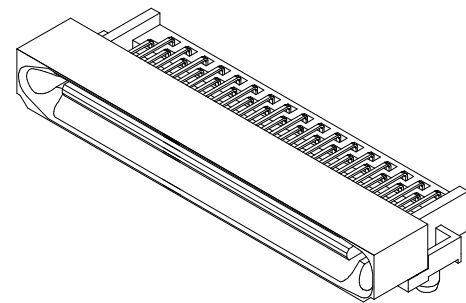


<b>CHANGE MATERIAL</b> EC NO: UCP2009-1254 DRWN:MSIBARRA 2008/12/19 CHKD:BSMART 2009/01/06 APPR:SMILLER 2009/01/06	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE MM/IN		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION
		mm	INCH	DRAWN BY	DATE	SALES ASSMBLY EBBI 50D RIGHT ANGLE BLIND MATE PLUG MOLEX INCORPORATED		
		4 PLACES ±---	±---	RAN	1995/04/26			
		3 PLACES ±---	±.010	CHECKED BY	DATE			
2 PLACES ±0.25	±---	RAN	1995/04/26					
1 PLACE ±---	±---	APPROVED BY	DATE	MOLEX INCORPORATED SDA-71661-25**				
ANGULAR ±1/2°		CAB	1995/04/26					
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MATERIAL NO.	DOCUMENT NO.			SHEET NO.		
		SEE TABLE	SDA-71661-25**			1 OF 2		
		SIZE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					



RECOMMENDED PC BOARD LAYOUT  
COMPONENT SIDE  
SEE NOTE 6

3.491 (88.67)	3.699 (93.95)	3.320 (84.33)	3.200 (81.28)	.110 (2.79)	130	71661-2513
2.741 (69.63)	2.949 (74.90)	2.570 (65.28)	2.450 (62.23)	.110 (2.79)	100	71661-2511
2.241 (56.92)	2.449 (62.20)	2.070 (52.586)	1.950 (49.53)	.110 (2.79)	80	71661-2580
1.941 (49.31)	2.149 (54.58)	1.770 (44.96)	1.650 (41.91)	.110 (2.79)	68	71661-2568
1.941 (49.31)	2.149 (54.58)	1.770 (44.96)	1.650 (41.91)	.125 (3.18)	68	71661-2518
1.241 (31.53)	1.449 (36.80)	1.070 (27.18)	.950 (24.13)	.110 (2.79)	40	71661-2540
D	C	B	A	E	CKT (*N)	ITEM NUMBER



68 CIRCUIT ASSEMBLY SHOWN  
SCALE 2:1

<b>UPDATE REV LEVEL</b> EC NO: UCP2009-1254 DRWN:MS BARRA 2008/12/19 CHKD:BSMART 2009/01/06 APPR:SMILLER 2009/01/06	DESCRIPTION REV K	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED) <table border="1"> <tr> <th></th> <th>mm</th> <th>INCH</th> </tr> <tr> <td>4 PLACES</td> <td>± .010</td> <td>± .0004</td> </tr> <tr> <td>3 PLACES</td> <td>± .010</td> <td>± .0004</td> </tr> <tr> <td>2 PLACES</td> <td>± 0.25</td> <td>± .010</td> </tr> <tr> <td>1 PLACE</td> <td>± .010</td> <td>± .0004</td> </tr> </table>		mm	INCH	4 PLACES	± .010	± .0004	3 PLACES	± .010	± .0004	2 PLACES	± 0.25	± .010	1 PLACE	± .010	± .0004	DIMENSION STYLE <b>MM/IN</b>	SCALE <b>4:1</b>	DESIGN UNITS <b>INCH</b>	THIRD ANGLE PROJECTION
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DRAWN BY RAN	DATE 1995/04/26	CHECKED BY RAN	DATE 1995/04/26	TITLE <b>SALES ASSMBLY EBBI 50D RIGHT ANGLE BLIND MATE PLUG</b>																		
APPROVED BY CAB	DATE 1995/04/26	MATERIAL NO. <b>SEE TABLE</b>		DOCUMENT NO. <b>SDA-71661-25**</b>		SHEET NO. <b>2 OF 2</b>																
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS																						