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Part Number: [0716611530](#)
Status: **Active**
Overview: [ebbi_50d](#)
Description: 1.27mm (.050") Pitch EBBI™ 50D Plug, Vertical, with Latch, 30 Circuits, 2.79mm (.110") 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) 30
Circuits (maximum) 30
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 Yes
Material - Metal Copper Alloy
Material - Plating Mating Gold
Material - Plating Termination Tin
Material - Resin High Temperature Thermoplastic
Number of Rows 4
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
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



Series

image - Reference only

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
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	
Reference - Drawing Numbers	
Packaging Specification	PK-70873-084*
Sales Drawing	SDA-71661-15**

This document was generated on 05/31/2010

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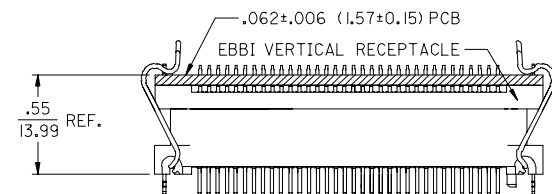
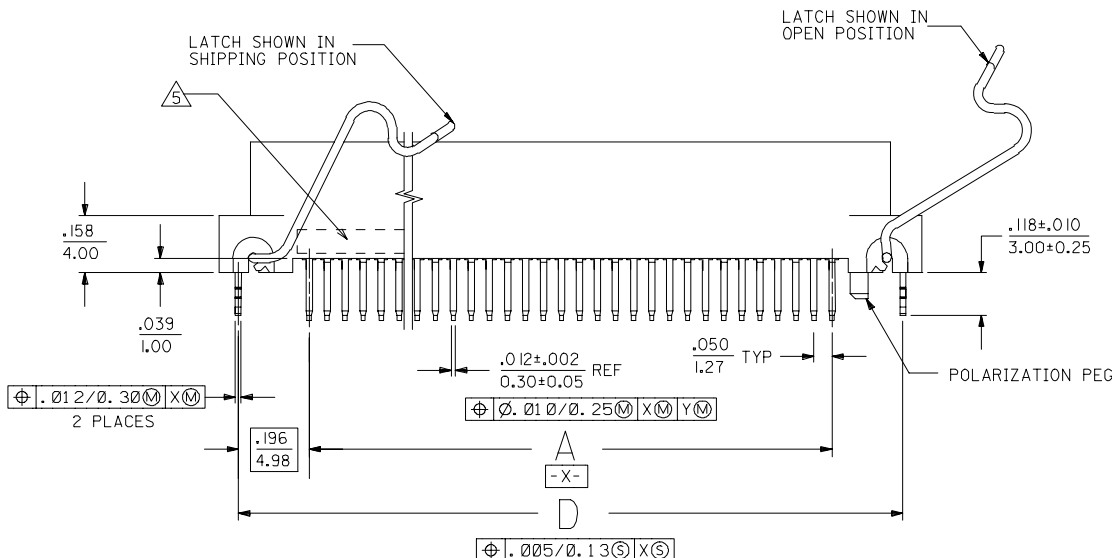
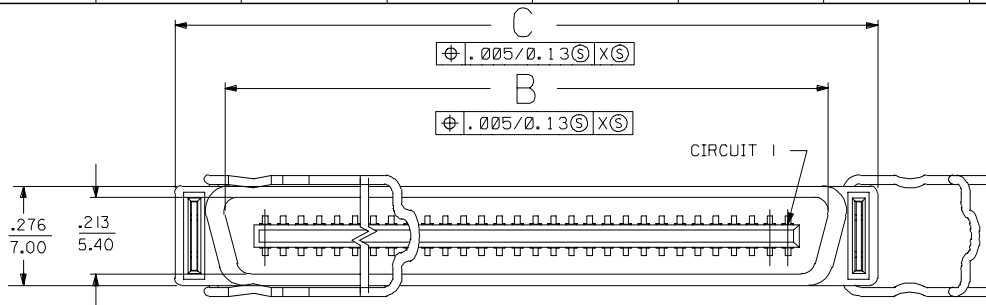
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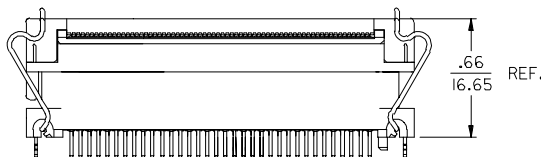
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EBBI VERTICAL RECEPTACLE
SHOWN LATCHED TO
EBBI PLUG
(SDA-71660-1***)



EBBI IDT RECEPTACLE
SHOWN LATCHED TO
EBBI PLUG
(SDA-71660-3***)

REFERENCE APPLICATION VIEWS

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.

NOTES:

1) MATERIALS:

HOUSING - LIQUID CRYSTAL POLYMER (LCP), GLASS FILLED, UL94V-0, COLOR: BLACK
TERMINALS - COPPER ALLOY
METAL PEGS - COPPER ALLOY
METAL LATCHES - STAINLESS STEEL.

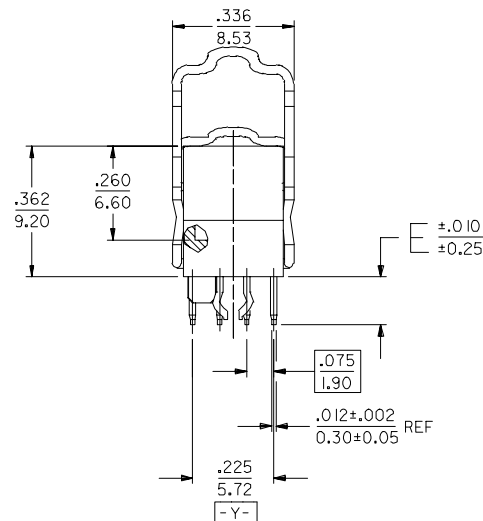
2) PLATING:

TERMINALS:
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.
METAL PEGS:
50 MICROINCHES/1.27 MICROMETER MINIMUM TIN

3) ASSEMBLY MATES WITH MOLEX P/N 71660-****.
CONFORMS TO PRODUCT SPECIFICATION PS-71660.

△ RECOMMENDED P.C. BOARD THICKNESS IS .062 (1.6).

△ 5 FOUR DIGIT DATE CODE (WK YR), EXAMPLE => 26 96
LOCATED IN AREA INDICATED.



2	C
1	C
SHT	REV

QUALITY SYMBOLS		GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE		DESIGN UNITS		THIRD ANGLE PROJECTION	
				IN/MM		4:1		INCH			
				mm	INCH						
4 PLACES ±---		±---		±---	±---	DRAWN BY		DATE		TITLE	
3 PLACES ±---		±.005		±.005	±.005	DGA		09/15/2005		SALES ASSEMBLY	
2 PLACES ±0.13		±.01		±.01	±.01	CHECKED BY		DATE		MOLEX EBBI 50D VERT PLUG	
1 PLACE ±0.25		±---		±---	±---	RAN		09/15/2005		WITH BAIL LATCHES	
ANGULAR ±1/2°						APPROVED BY		DATE		MOLEX INCORPORATED	
						GWF		09/15/2005			
DRAFT WHERE APPLICABLE		MUST REMAIN		WITHIN DIMENSIONS		MATERIAL NO.		DOCUMENT NO.		SHEET NO.	
						SEE TABLE		SDA-71661-15**		1 OF 2	
						THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX		INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION			

CHG LATCH GEO		FC NO: UCP2005-2042		2005/07/19		2005/07/19		2005/07/20		2005/07/20	
DRAWN BY		CHFKD: BARKER		APPR: MILLER		DESCRIPTION					
REV											

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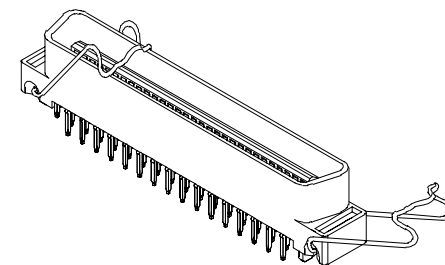
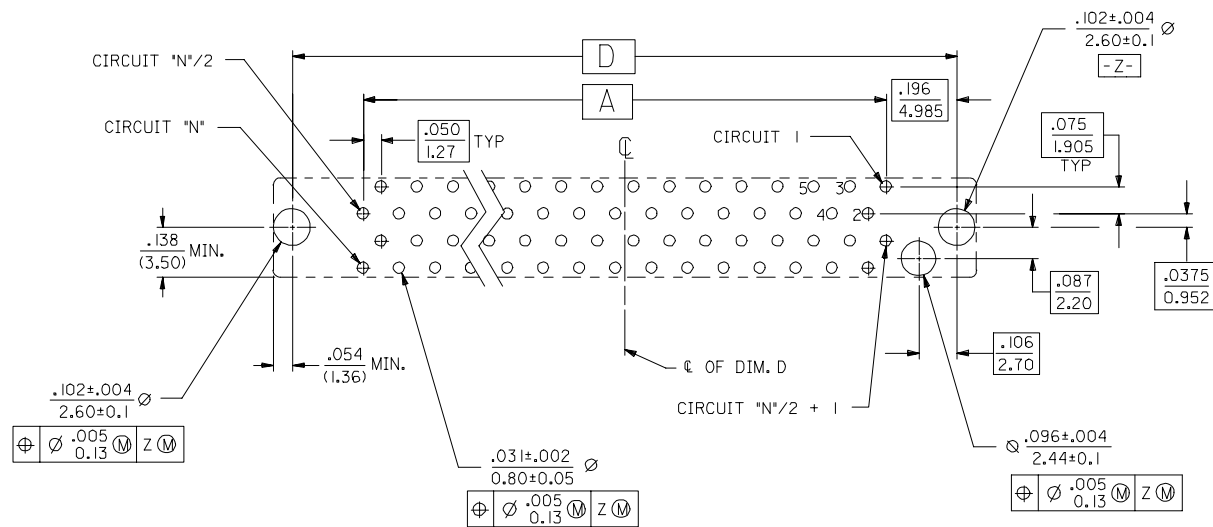
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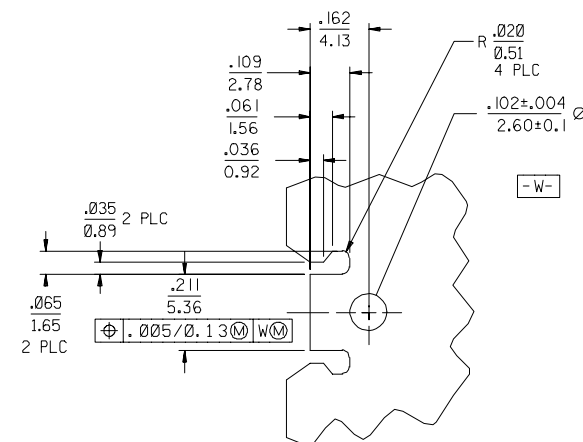
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RECOMMENDED PC BOARD LAYOUT Δ COMPONENT SIDE



60 CIRCUIT ASSEMBLY SHOWN



DETAIL FOR RECEPTACLE PCB LATCHING

.134 (3.40)	2.042 (51.88)	2.149 (54.58)	1.875 (47.65)	1.650 (41.91)	68	71661-1569	PK-70873-0845
.134 (3.40)	1.842 (46.80)	1.949 (49.50)	1.676 (42.57)	1.450 (36.83)	60	71661-1561	PK-70873-0845
.110 (2.79)	2.342 (59.50)	2.449 (62.20)	2.176 (55.27)	1.950 (49.53)	80	71661-1580	PK-70873-0846
.110 (2.79)	2.042 (51.88)	2.149 (54.58)	1.875 (47.65)	1.650 (41.91)	68	71661-1568	PK-70873-0845
.110 (2.79)	1.842 (46.80)	1.949 (49.50)	1.676 (42.57)	1.450 (36.83)	60	71661-1560	PK-70873-0845
.110 (2.79)	1.092 (27.75)	1.199 (30.45)	.925 (23.52)	.700 (17.78)	30	71661-1530	PK-70873-0840
E	D	C	B	A	CKT ("N")	MATERIAL NUMBER	PACKAGING SPECIFICATION

CHG ISO GEOMETRY EC NO: UCP2005-2042 DRAWN BY: DRWNSMART 2005/07/19 CHKD: BARKER 2005/07/19 APPR: SMILLER 2005/07/20 REV: C	QUALITY SYMBOLS ▴=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE ECD/MML PCB	SCALE LATCHING	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
		mm	INCH	DRAWN BY DGA	DATE 09/15/1996	TITLE SALES ASSEMBLY MOLEX EBB1 50D VERT PLUG WITH BAIL LATCHES		
		4 PLACES ± --- ± --- 3 PLACES ± --- ± .005 2 PLACES ± 0.13 ± .01 1 PLACE ± 0.25 ± --- ANGULAR ±1/2°	CHECKED BY RAN	DATE 09/15/1996	MOLEX INCORPORATED			
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		APPROVED BY GWF	DATE 09/15/1996	MATERIAL NO. SEE TABLE	DOCUMENT NO. SDA-71661-15**	SHEET NO. 2 OF 2