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Part Number: [0716611580](#)
Status: **Active**
Overview: [ebbi_50d](#)
Description: 1.27mm (.050") Pitch EBBI™ 50D Plug, Vertical, with Latch, 80 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) 80
 Circuits (maximum) 80
 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

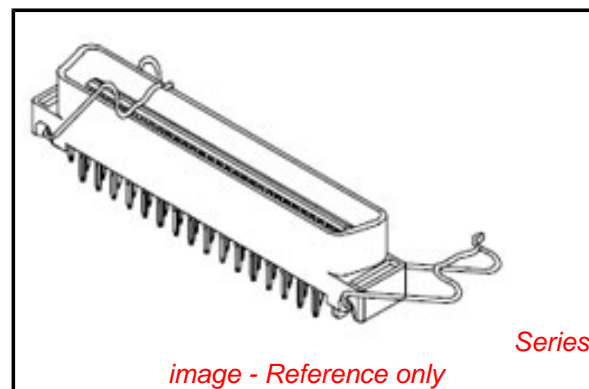


image - Reference only

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

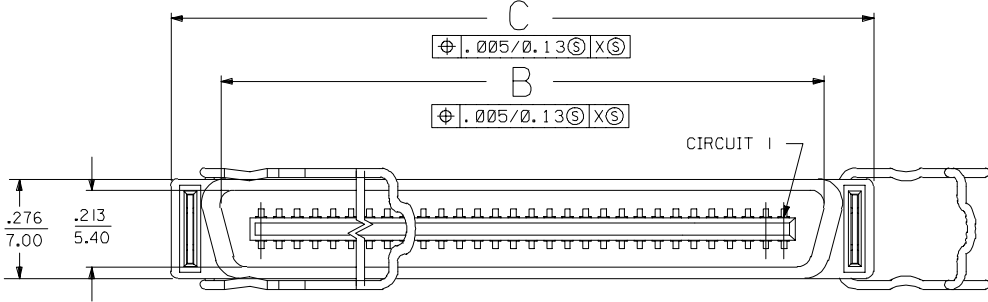
Material Info**Reference - Drawing Numbers**

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

This document was generated on 05/31/2010

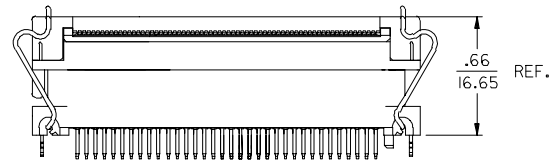
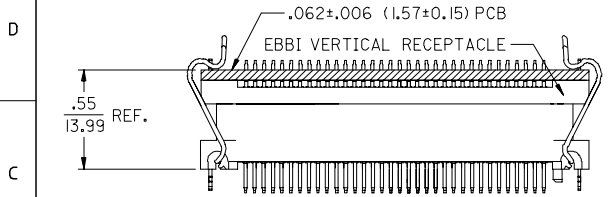
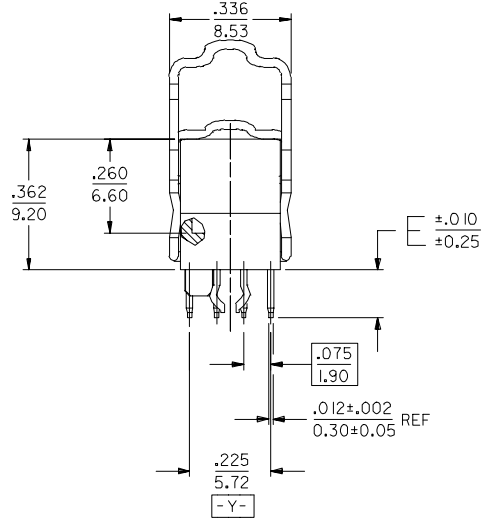
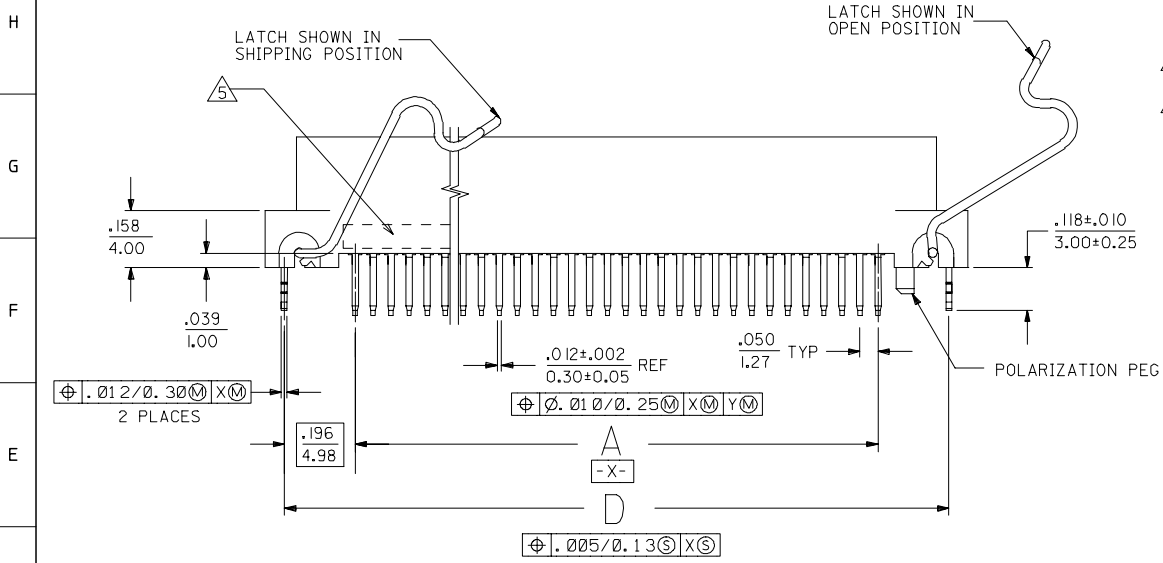
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13 12 11 10 9 8 7 6 5 4 3 2 1



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



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

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

REFERENCE APPLICATION VIEWS

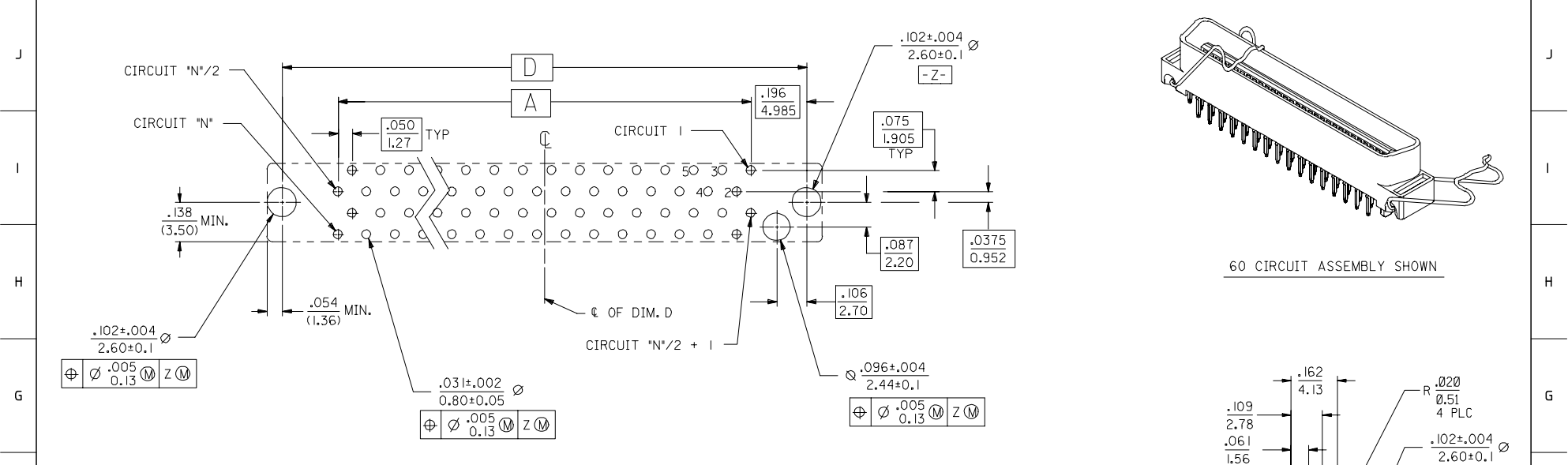
NOTE FOR LEAD FREE CONVERSION:
THE PRIMARY SHIPPING CARTON WILL BE LABELED "COMPLIANT TO ROHS DIRECTIVE 2002/95/EC AND ELV ANNEX II OF DIRECTIVE 2000/53/EC". CARTONS WITHOUT THIS LABEL MAY CONTAIN PRODUCT WITH LEAD.

2	C
1	C
SHT	REV

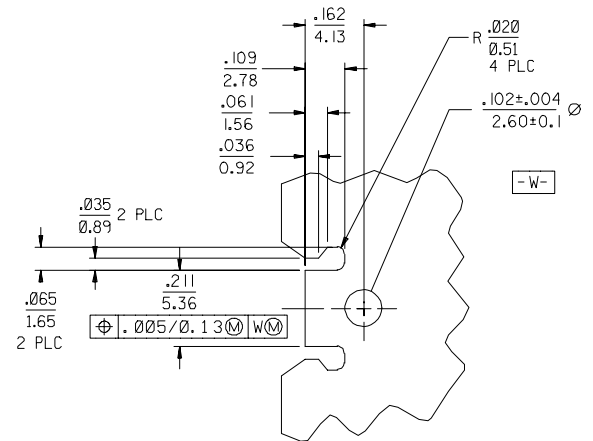
CHG LATCH GEO FC NO: UCP2005-2042 DRAWNSMART 2005/07/19 CHKD:BBARKER 2005/07/19 APPR:SMILLER 2005/07/20 DESCRIPTION	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)	DIMENSION STYLE	SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
	$\nabla=0$ $\nabla=0$	mm INCH 4 PLACES ± --- ± --- 3 PLACES ± --- ±.005 2 PLACES ± 0.13 ±.01 1 PLACE ± 0.25 ± --- ANGULAR ±1/2°	IN/MM DRAWN BY DATE DGA 09/15/2005 CHECKED BY DATE RAN 09/15/2005 APPROVED BY DATE GWF 09/15/2005	4:1	INCH	TITLE SALES ASSEMBLY MOLEX EBBI 50D VERT PLUG WITH BAIL LATCHES MOLEX INCORPORATED
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	MATERIAL NO. SEE TABLE	DOCUMENT NO. SDA-71661-15**	SHEET NO. 1 OF 2		
	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION					

12 11 10 9 8 7 6 5 4 3 2 1

13 12 11 10 9 8 7 6 5 4 3 2 1



RECOMMENDED PC BOARD LAYOUT COMPONENT SIDE



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
C	.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 FC NO: UCP2005-2042 DRAWNSMART 2005/07/19 CHKD:BBARKER 2005/07/19 APPR:SMILLER 2005/07/20 REV 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 ± .01 1 PLACE ± 0.25 ± --- ANGULAR ±1/2°	ECOMP DATE DGA 09/15/1996 CHECKED BY RAN 09/15/1996 APPROVED BY GWF 09/15/1996	INCH LATCHING TITLE SALES ASSEMBLY MOLEX EBBI 50D VERT PLUG WITH BAIL LATCHES	INCH	☉
	DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	SEE TABLE	MATERIAL NO.	DOCUMENT NO.	SHEET NO.	
			71661-1561	SDA-71661-15**	2 OF 2	

13 12 11 10 9 8 7 6 5 4 3 2 1