

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

**Part Number:** [0741395060](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Pitch EBJ™ 50D Plug, Surface Mount, Vertical, 60 Circuits, 3.00mm (.118") Retention Clip

**Documents:**

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

**General**

Product Family PCB Headers  
 Series [74139](#)  
 Application Board-to-Board, Wire-to-Board  
 Product Name EBJ™

**Physical**

Breakaway No  
 Circuits (Loaded) 60  
 Circuits (maximum) 60  
 Color - Resin Black  
 Durability (mating cycles max) 500  
 Glow-Wire Compliant No  
 Lock to Mating Part Yes  
 Material - Metal Brass, Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 2  
 Orientation Vertical  
 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) 50  
 Plating min: Termination (µm) 1.25  
 Polarized to Mating Part Yes  
 Shrouded Fully  
 Stackable No  
 Temperature Range - Operating -40°C to +105°C  
 Termination Interface: Style Through Hole

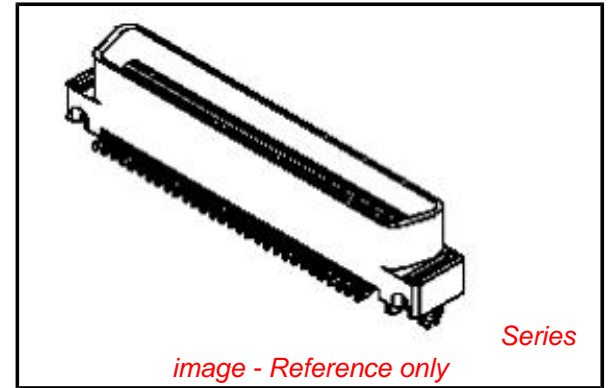
**Electrical**

Current - Maximum per Contact 1A  
 Voltage - Maximum 30V

**Solder Process Data**

Duration at Max. Process Temperature (seconds) 40  
 Lead-free Process Capability Reflow Capable (SMT only)  
 Max. Cycles at Max. Process Temperature 3  
 Process Temperature max. C 260

**Material Info**



**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**

[74139Series](#)

**Mates With**

[71660](#) , [87552](#)

**Reference - Drawing Numbers**

Product Specification  
Sales Drawing

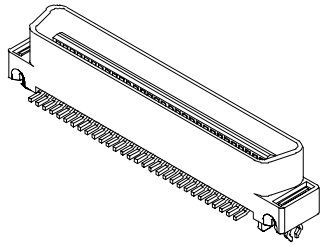
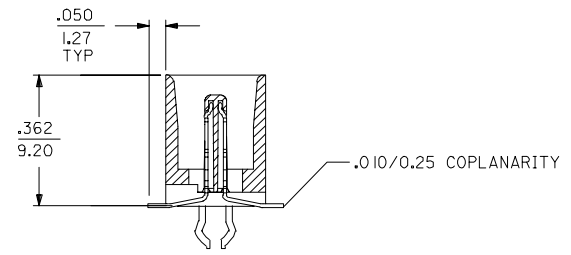
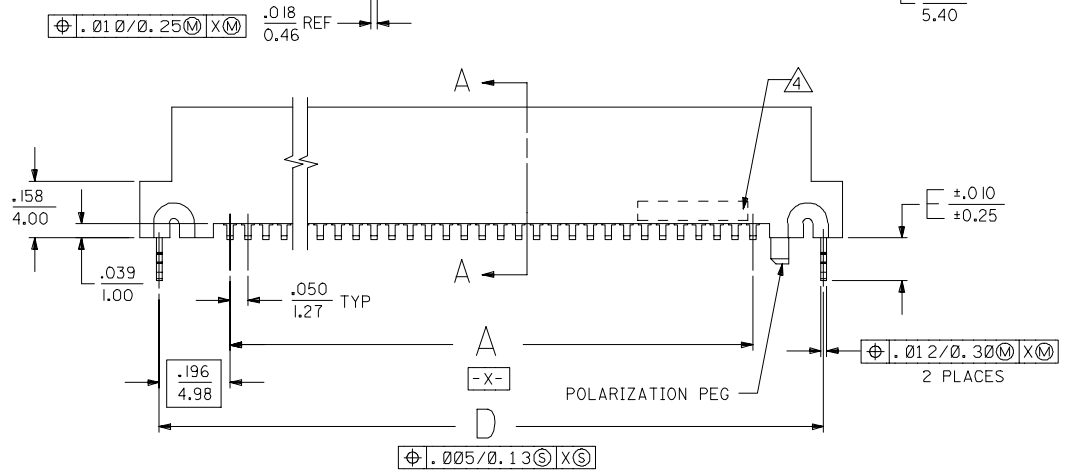
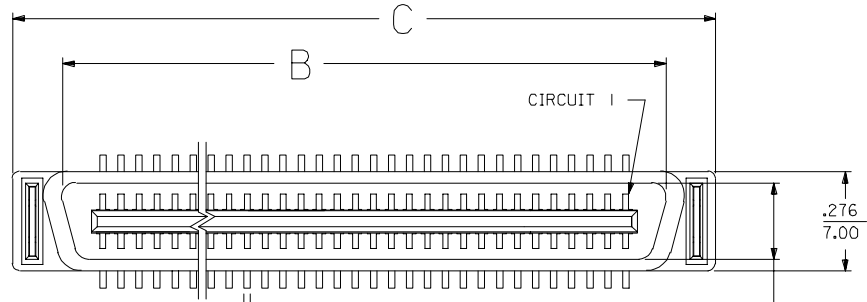
PS-71660  
SD-74139-001

This document was generated on 04/21/2010

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NOTES:

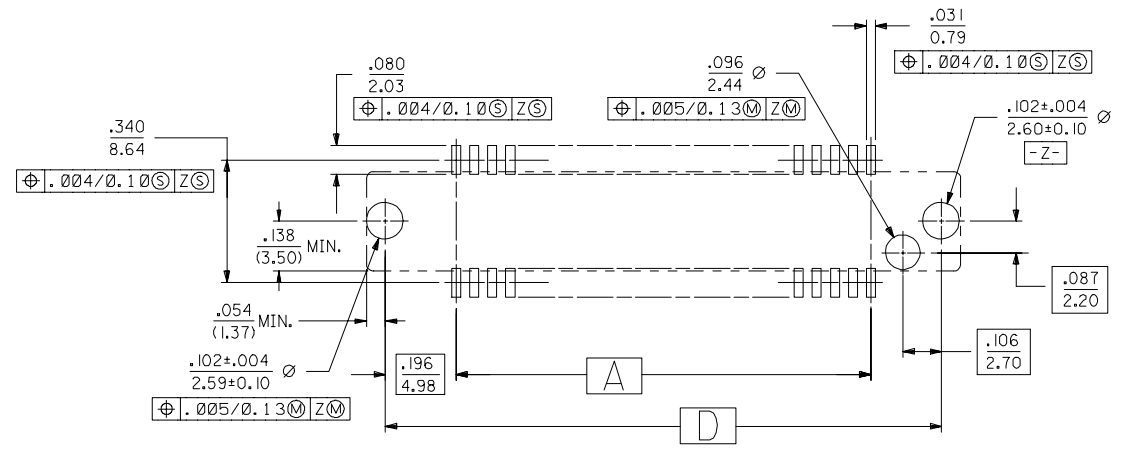
- 1) MATERIALS:  
HOUSING: GLASS-FILLED LCP (LIQUID CRYSTAL POLYMER)  
UL 94 V 0, BLACK  
TERMINALS: BRASS  
BOARDLOCK: PHOSPHOR BRONZE
- 2) PLATING:  
.000030/(0.00076) MINIMUM GOLD IN CONTACT AREA AND  
.000050/(0.00127) MINIMUM TIN IN TAIL AREA OVER  
.000075/(0.00191) MINIMUM NICKEL UNDERPLATING OVERALL.
- 3) ASSEMBLY MATES WITH MOLEX P/N SDA-71660-\*\*\*\*.  
CONFORMS TO PRODUCT SPECIFICATION PS-71660.
- 4) FOUR DIGIT DATE CODE (WK, YR), EXAMPLE => 26 96  
LOCATED IN AREA INDICATED.
- 5) PACKAGED PER SPECIFICATION PK-70873-055.



60 CIRCUIT ASSEMBLY SHOWN  
SCALE = 2:1

FIX PCB LAYOUT GEOM EC NO: UCP2007-2252 DRAWN BY: BARKER 2007/05/06 CHKD: MIBARRA 2007/05/17 APPR: SMILLER 2007/05/21 REV:	QUALITY SYMBOLS	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION	
	=0 =0	mm	INCH	IN/MM		4:1	INCH		
		4 PLACES ±---	±---	DRAWN BY	DATE	TITLE			
		3 PLACES ±---	±.005	BSMART	01/20/2005	SALES ASSY EBBI 50D VERT SMT PLUG-NO LATCHES, NO VAC CAP			
	2 PLACES ±0.13	±.01	CHECKED BY	DATE	MATERIAL NO.				
	1 PLACE ±0.25	±---	BARKER	01/20/2005	DOCUMENT NO.				
	ANGULAR ±1/2°		APPROVED BY	DATE	SHEET NO.				
			SMILLER	01/20/2005	1 OF 2				
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS			SEE TABLE		SD-74139-001				
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION									

ITEM NUMBER	CIRCUIT SIZE	RECOMMENDED CIRCUIT BOARD THICKNESS	A	B	C	D	E
74139-5100	100	.062±.006 (1.57±0.15)	2.450 (62.23)	2.676 (67.97)	2.949 (74.90)	2.842 (72.19)	.118 (3.00)
74139-5080	80	.062±.006 (1.57±0.15)	1.950 (49.53)	2.176 (55.27)	2.449 (62.20)	2.342 (59.50)	.118 (3.00)
74139-5069	68	.116±.006 (2.95±0.15)	1.650 (41.91)	1.875 (47.65)	2.149 (54.58)	2.042 (51.88)	.172 (4.37)
74139-5068	68	.062±.006 (1.57±0.15)	1.650 (41.91)	1.875 (47.65)	2.149 (54.58)	2.042 (51.88)	.118 (3.00)
74139-5060	60	.062±.006 (1.57±0.15)	1.450 (36.83)	1.676 (42.57)	1.949 (49.50)	1.842 (46.80)	.118 (3.00)
74139-5050	50	.062±.006 (1.57±0.15)	1.200 (30.48)	1.426 (36.22)	1.699 (43.15)	1.592 (40.45)	.118 (3.00)
74139-5040	40	.062±.006 (1.57±0.15)	.950 (24.13)	1.176 (29.87)	1.449 (36.80)	1.342 (34.10)	.118 (3.00)
74139-5031	30	.116±.006 (2.95±0.15)	.700 (17.78)	.925 (23.52)	1.199 (30.45)	1.092 (27.75)	.172 (4.37)
74139-5030	30	.062±.006 (1.57±0.15)	.700 (17.78)	.925 (23.52)	1.199 (30.45)	1.092 (27.75)	.118 (3.00)



<b>CORRECT GEOMETRY</b> FCC NO: UCP2007-2252 DRAWN: BBARKER 2007/05/06 CHKD: MBARRA 2007/05/17 APPR: SMILLER 2007/05/17 REV:	<b>QUALITY SYMBOLS</b>  	<b>GENERAL TOLERANCES (UNLESS SPECIFIED)</b>		<b>DIMENSION STYLE</b> IN/MM		SCALE 4:1	DESIGN UNITS INCH	THIRD ANGLE PROJECTION	
		4 PLACES ± .005 ± .005	3 PLACES ± .005 ± .005	2 PLACES ± 0.13 ± .01	1 PLACE ± 0.25 ± .01	ANGULAR ± 1/2°	DRAWN BY BSMART	DATE 01/20/2005	TITLE SALES ASSY EBBI 50D VERT SMT PLUG-NO LATCHES, NO VAC CAP
		MATERIAL NO. SEE TABLE		APPROVED BY SMILLER		DATE 01/20/2005	MOLEX INCORPORATED		
		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		DOCUMENT NO. SD-74139-001	SHEET NO. 2 OF 2