

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

**Part Number:** [0738290001](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Pitch EBBI™ 50D Receptacle, Vertical, Press-fit, Extended Height, SCA-2, 80 Circuits

**Documents:**

[3D Model](#) [Product Specification PS-73826-0000 \(PDF\)](#)  
[Drawing \(PDF\)](#) [RoHS Certificate of Compliance \(PDF\)](#)

**Agency Certification**

CSA LR19980  
 UL E29179

**General**

Product Family PCB Receptacles  
 Series [73829](#)  
 Application Board-to-Board  
 Product Name EBBI™

**Physical**

Circuits (Loaded) 80  
 Color - Resin Black  
 Durability (mating cycles max) 500  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Guide to Mating Part Yes  
 Material - Metal High Performance Alloy (HPA), Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin-Lead  
 Material - Resin High Temperature Thermoplastic  
 Number of Rows 2  
 Orientation Vertical  
 PC Tail Length (in) 0.125 In  
 PC Tail Length (mm) 3.18 mm  
 PCB Locator Yes  
 PCB Retention Yes  
 PCB Thickness Recommended (in) 0.093 In  
 PCB Thickness Recommended (mm) 2.40 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) 75  
 Plating min: Termination (µm) 1.875  
 Polarized to PCB Yes  
 Temperature Range - Operating -40°C to +105°C  
 Termination Interface: Style Through Hole - Compliant Pin

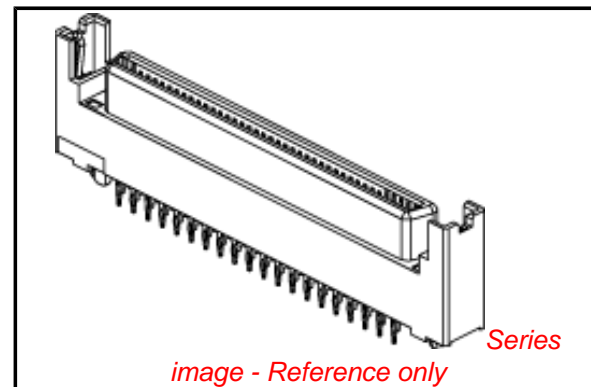
**Electrical**

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

**Solder Process Data**

Replacement RoHS Compliant Part Number 0738295001

**Material Info**



**EU RoHS**

**RoHS Compliant by Exemption**

**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**

[73829Series](#)

**Mates With**

[71661](#) , [87572](#) , [87571](#) , [87012](#)

**Reference - Drawing Numbers**

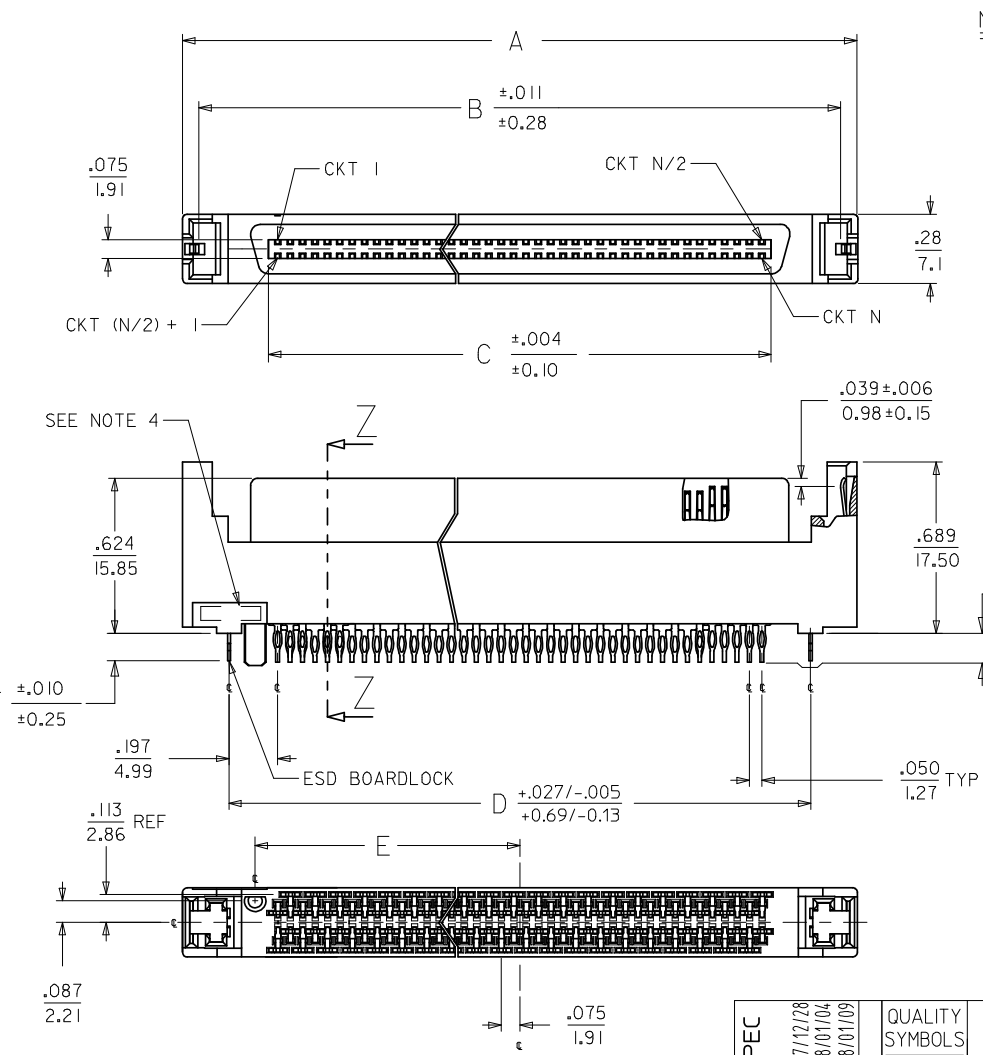
Product Specification  
Sales Drawing

PS-73826-0000  
SD-73829-001

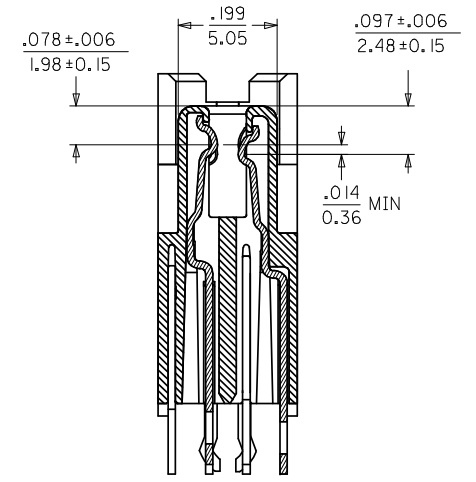
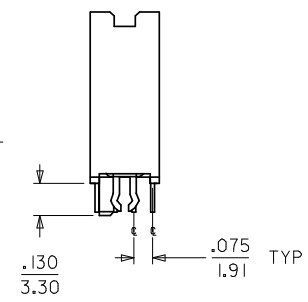
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10 9 8 7 6 5 4 3 2 1



- NOTES:**
- MATERIAL:**  
HOUSING: I.R. COMPATIBLE POLYMER, GLASS FILLED, UL 94 V 0, BLACK  
TERMINALS: COPPER ALLOY  
BOARDLOCK: COPPER ALLOY
  - FINISH:**  
TERMINALS: SELECTIVE GOLD IN CONTACT AREA  
THICKNESS = 30 MICROINCHES / 0.763 MICROMETERS  
SELECTIVE TIN/LEAD IN TAIL AREA  
THICKNESS = 100 MICROINCHES/ 2.54 MICROMETERS  
NICKEL UNDERPLATE OVERALL.  
ESD BOARDLOCK: TIN OVERALL.
  - PRODUCT SPECIFICATION:** PS-73826-0000
  - FOUR DIGIT DATE CODE** IN THIS LOCATION (WK YR).
  - CONTACT GAP** WILL ACCOMMODATE A MATING CONNECTOR OF:  
.063+/-0.003 (1.60+/- 0.08)
  - PRODUCT CONFORMS TO COSMETIC SPEC PS-45499-002, CLASS C.**



SECTION Z-Z  
SCALE - 4:1

ADD COSMETIC SPEC  
EC NO: UCP2008-1086  
DRWN:BBARKER 2007/12/28  
CHKD:SDANNELLEY 2008/01/04  
APPR:SMILLER 2008/01/09

QUALITY SYMBOLS	DESCRIPTION
▽=0	
▽=0	

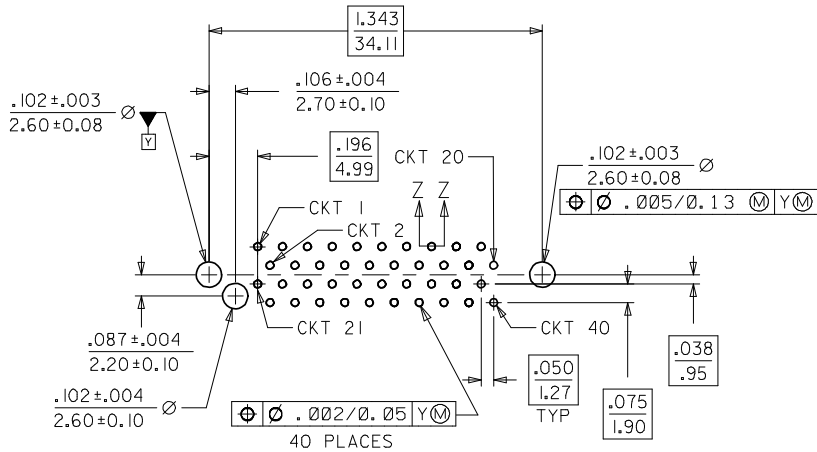
GENERAL TOLERANCES (UNLESS SPECIFIED)	
4 PLACES	± --- ± ---
3 PLACES	± --- ± .005
2 PLACES	± 0.13 ± .01
1 PLACE	± 0.25 ± ---
ANGULAR ± °	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS	

DIMENSION STYLE	
IN/MM	
DRAWN BY	DATE
ACHAMMER	98/05/07
CHECKED BY	DATE
ACHAMMER	98/05/07
APPROVED BY	DATE
BANAKIS	98/05/07
MATERIAL NO.	
SEE TABLE	

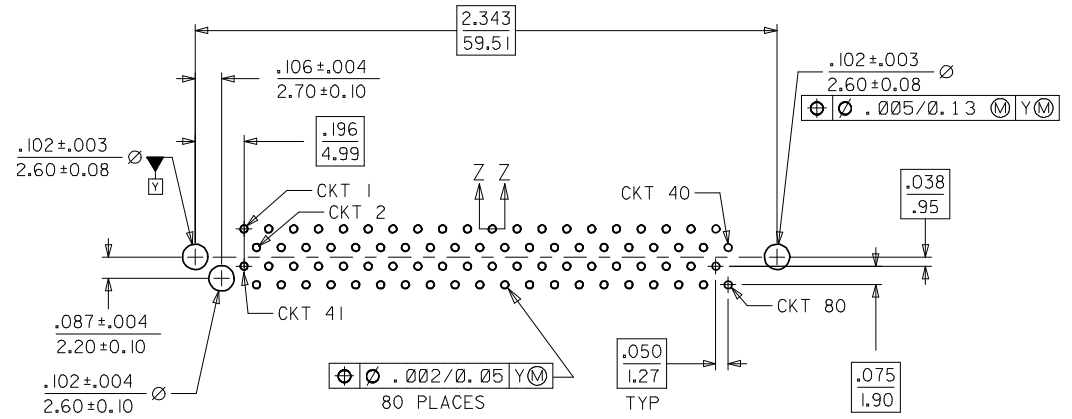
SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION
SALES ASSEMBLY EXTENDED HEIGHT SCA-2 PRESS-FIT RECEPTACLE		
molex MOLEX INCORPORATED		
MATERIAL NO.	DOCUMENT NO.	SHEET NO.
SEE TABLE	SD-73829-001	1 OF 2
THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		

9 8 7 6 5 4 3 2 1

MATERIAL NUMBER	CIRCUIT SIZE	DIMENSION A	DIMENSION B	DIMENSION C	DIMENSION D	DIMENSION E	DIMENSION F	DIMENSION P	ADVANCED TERMINALS / CIRCUITS (SECTION Z-Z, SHEET 1)
738290001	80	2.717/(69.01)	2.583/(65.61)	2.025/(51.44)	2.343/(59.51)	1.066/(27.06)	.109/(2.77)	.125/(3.18)	1, 36, 37, 38, 39, 40, 41, 42, 43, 45, 46, 75, 76, 77, 78, 79, 80
738290002	40	1.717/(43.61)	1.583/(40.21)	1.025/(26.04)	1.343/(34.11)	.566/(14.38)	.109/(2.77)	.125/(3.18)	21, 22, 23, 26, 29, 32, 35, 36, 37, 38, 39, 40

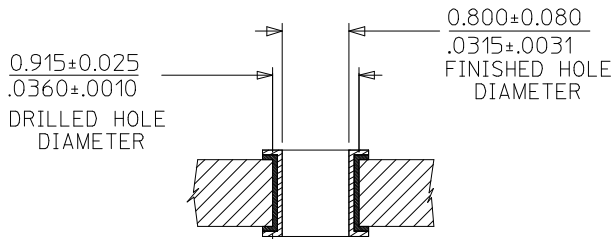


PCB LAYOUT FOR 40 CIRCUIT COMPONENT SIDE



PCB LAYOUT FOR 80 CIRCUIT COMPONENT SIDE

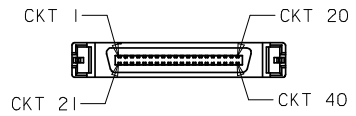
RECOMMENDED BOARD THICKNESS = .093



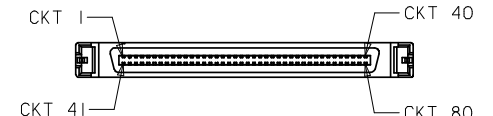
0.050±0.030/.0020±.0012 MINIMUM COPPER THICKNESS  
 0.0076/.0003 MINIMUM TIN OR TIN/LEAD THICKNESS

NOTE: SECTION Z-Z - RECOMMENDED PCB HOLE CONFIGURATION

THE DRILLED HOLE SIZE IS BASED ON THE RECOMMENDED PLATINGS AND THICKNESSES. IF OTHER PLATING TYPES AND/OR THICKNESSES ARE USED, A DRILL SIZE THAT WILL RESULT IN THE FINISHED HOLE SIZE INDICATED WILL NEED TO BE USED.



40 CIRCUIT TERMINAL SEQUENCE SCALE - 1:1



80 CIRCUIT TERMINAL SEQUENCE SCALE - 1:1

<b>ADD COSMETIC SPEC</b> EC NO: UCP2008-1086 DR: WNBARKER 2007/02/28 CHKD: SOANWELLY 2008/01/04 APPR: SWILLER 2008/01/09	QUALITY SYMBOLS ▽=0 ▽=0	GENERAL TOLERANCES (UNLESS SPECIFIED)		DIMENSION STYLE IN/MM		SCALE	DESIGN UNITS	THIRD ANGLE PROJECTION		
		4 PLACES ± --- ± ---	3 PLACES ± --- ± .005	2 PLACES ± 0.13 ± .01	1 PLACE ± 0.25 ± ---	DRAWN BY ACHAMMER	DATE 98/05/07		TITLE SALES ASSEMBLY EXTENDED HEIGHT SCA-2 PRESS-FIT RECEPTACLE	
		ANGULAR ± °				APPROVED BY BANAKIS	DATE 98/05/07		MATERIAL NO.	DOCUMENT NO. SD-73829-001
		DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS				SEE TABLE	THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INCORPORATED AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		SHEET NO. 2 OF 2	