

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

**Part Number:** [0717431040](#)  
**Status:** **Active**  
**Description:** 1.27mm (.050") Pitch EBBI™ 50D Receptacle, Vertical SCA-2, 40 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 [71743](#)  
 Application Board-to-Board  
 Product Name EBBI™

**Physical**

Circuits (Loaded) 40  
 Color - Resin Black  
 Durability (mating cycles max) 500  
 Flammability 94V-0  
 Glow-Wire Compliant No  
 Guide to Mating Part Yes  
 Material - Metal Phosphor Bronze  
 Material - Plating Mating Gold  
 Material - Plating Termination Tin  
 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) 0.062 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) 10  
 Plating min: Termination (µm) 0.25  
 Polarized to PCB Yes  
 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 SMC & Wave Capable (TH only)  
 Max. Cycles at Max. Process Temperature 3  
 Process Temperature max. C 260

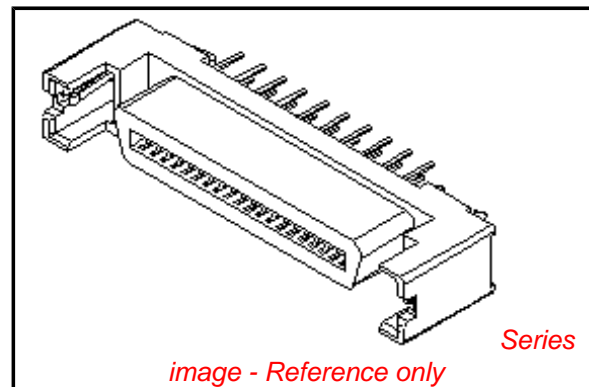


image - Reference only

**EU RoHS**

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

**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**

[71743Series](#)

**Mates With**

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

**Material Info**

**Reference - Drawing Numbers**

Product Specification

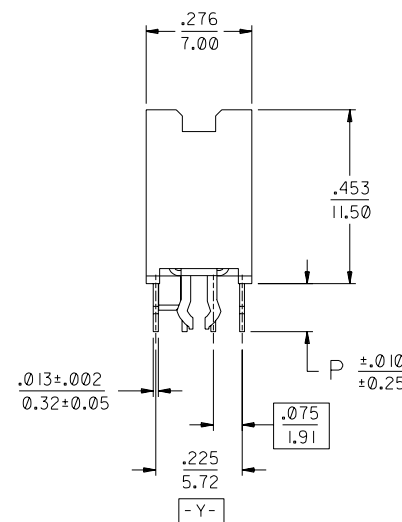
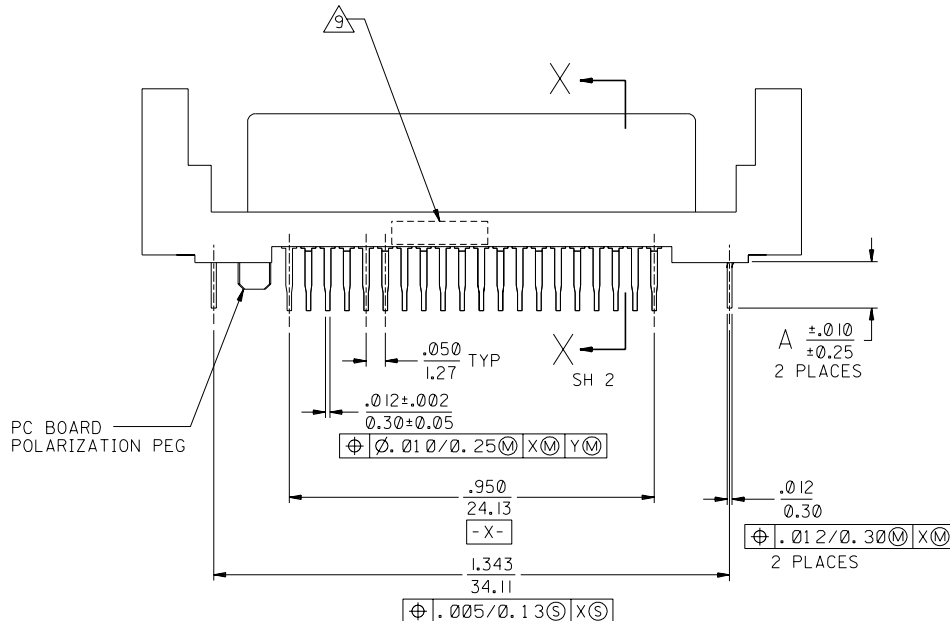
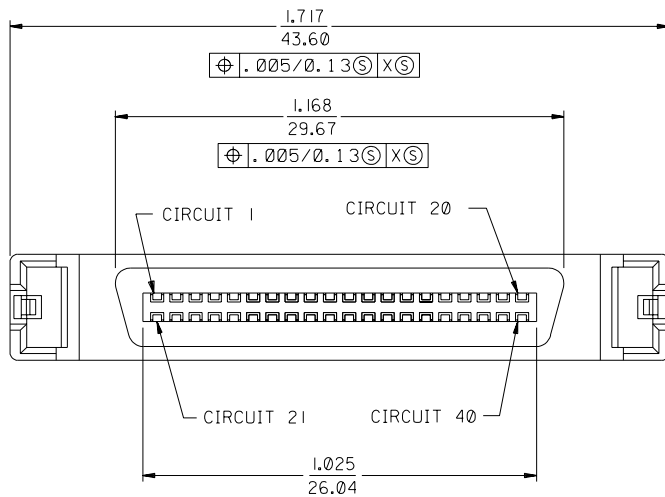
Sales Drawing

PS-73826-0000

SDA-71743-104\*

This document was generated on 04/14/2010

**PLEASE CHECK [WWW.MOLEX.COM](http://WWW.MOLEX.COM) FOR LATEST PART INFORMATION**



NOTES:

- 1) MATERIALS:  
HOUSING- LIQUID CRYSTAL POLYMER (LCP), GLASS FILLED, UL 94V-0, BLACK.  
TERMINALS- COPPER ALLOY  
ESD METAL PEGS- COPPER ALLOY.
- 2) PLATING OPTION 1:  
TERMINALS:  
.000030/(0.00076) MINIMUM GOLD IN CONTACT AREA AND .000100/(0.00254) MINIMUM TIN IN TAIL AREA OVER NICKEL UNDERPLATING OVERALL.  
ESD METAL PEGS:  
.000150/(0.00381) MINIMUM TIN OVER NICKEL UNDERPLATING OVERALL.
- 3) PLATING OPTION 2:  
TERMINALS: GOLD FLASH IN SELECT CONTACT AREA OVER .000030/(0.00076) MINIMUM PALLADIUM NICKEL IN CONTACT AREA AND .000075/(0.00191) MINIMUM TIN IN TAIL AREA OVER NICKEL UNDERPLATING OVERALL.  
ESD METAL PEGS:  
.000150/(0.00381) MINIMUM TIN OVER NICKEL UNDERPLATING OVERALL.
- 4) CONFORMS TO PRODUCT SPECIFICATION PS-73826-0000.
- 5) CIRCUIT NUMBERS 21 THRU 23, 26, 29, 32, 35 THRU 40, ARE ADVANCED (LONG) TERMINALS FOR SEQUENTIAL MATING.
- 6) CONNECTOR WILL ACCEPT MATING TO A P.C. BOARD WITH A THICKNESS OF .062±.003 (1.60±0.08).
- 7) SEE TABLE FOR RECOMMENDED P.C. BOARD THICKNESS.
- 8) PRODUCT PACKAGED PER PK-70873-083\*
- 9) FOUR DIGIT DATE CODE (WK, YR), EXAMPLE => 26 96 LOCATED IN AREA INDICATED.

PC BOARD POLARIZATION PEG

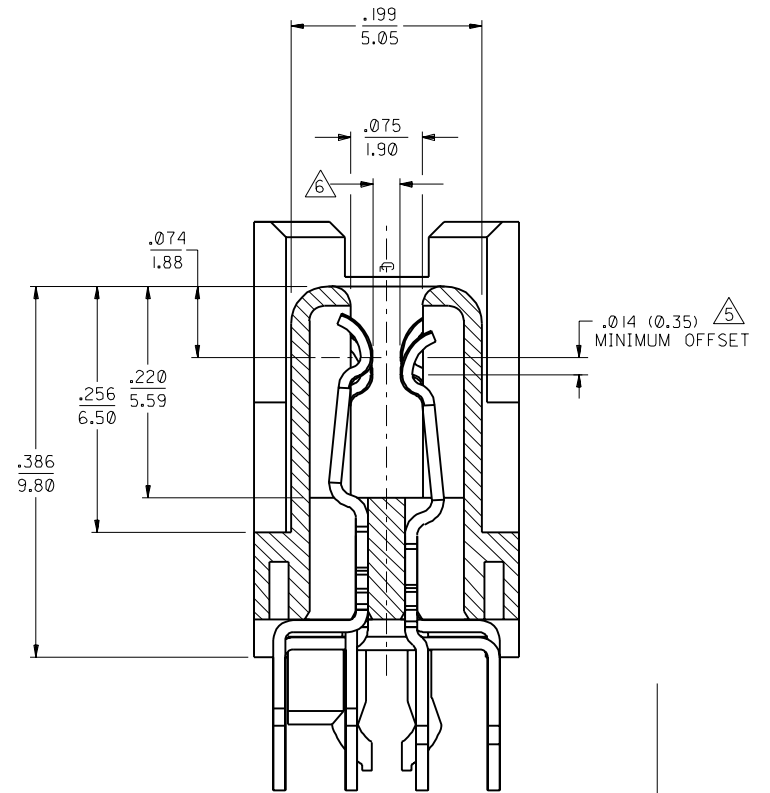
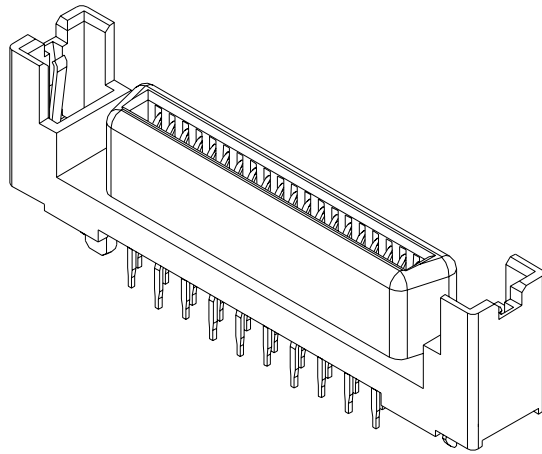
NOTE FOR LEAD FREE CONVERSION:

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.

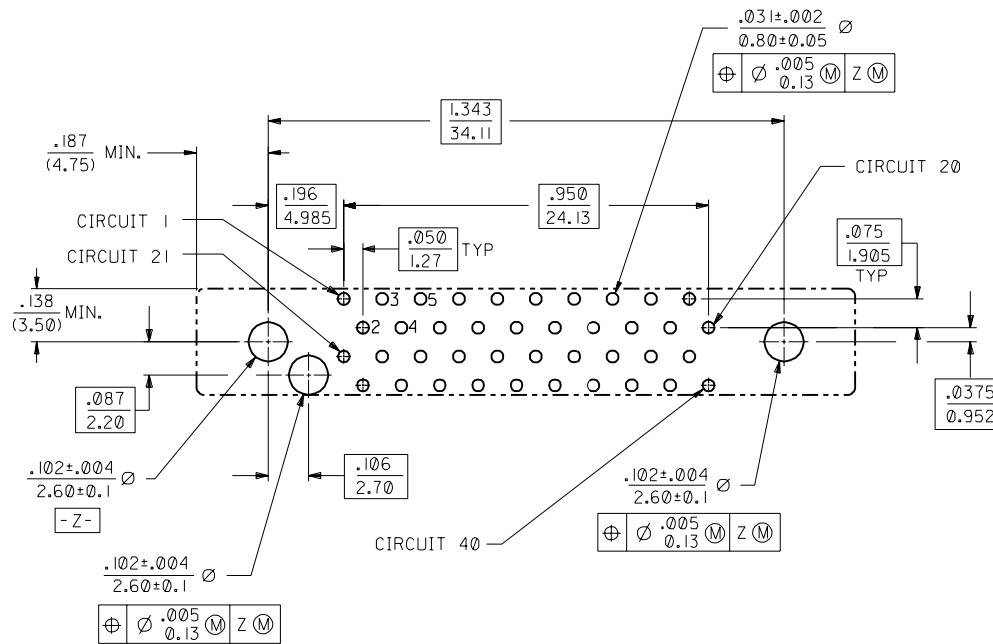
71743-1045	SEE NOTE 2	.130±.006 (3.30±0.15)	.148 (3.75)	.118 (3.00)
71743-1044	SEE NOTE 2	.125±.003 (3.18±0.08)	.134 (3.40)	.118 (3.00)
71743-1043	SEE NOTE 2	.093±.003 (2.36±0.08)	.125 (3.18)	.118 (3.00)
71743-1042	OBSOLETE			
71743-1041	SEE NOTE 2	.062±.003 (1.60±0.08)	.110 (2.79)	.118 (3.00)
71743-1040	SEE NOTE 2	.093±.003 (2.36±0.08)	.125 (3.18)	.118 (3.00)
PART NUMBER	PLATING	PCB THICKNESS	DIM. P	DIM. A

J	REVISOR	ECN UCP2004-2082	REVISION	04/04/22
I	REVISOR	ECN UCP2003-0093	REVISION	02/08/13
H	REVISOR	ECN UDT 2000-1231	REVISION	00/06/07
G	REVISOR	ECN UDT1999-0975	REVISION	99/05/26
F2	REVISOR	ECN UDT 1999-0865	REVISION	99-04-10
F1	REVISOR	ECN UDT1998-0294	REVISION	98/6/10
F	REVISOR	PER ECN U80654	REVISION	97-9-18
E	REVISOR	PER ECN U71495	REVISION	97-6-2
DI	REVISOR	PER ECN U70444	REVISION	96-11-26
D	REVISOR	PER ECN U61278	REVISION	5-2-96 DCA
C	REVISOR	PER ECN U600641	REVISION	11-29-95 DRS
B	REVISOR	PER ECN U60297	REVISION	9-1-95 RAN
A	REVISOR	PER ECN U60019	REVISION	8-15-95 RAN

DIMENSIONS SHOWN (METRIC) INCH UNLESS OTHERWISE SPECIFIED TOLERANCES: ANGULAR ± 1/2°		▽ = 0 ▽ = 0		REVISE ONLY ON CAD SYSTEM	
3 PLACE ± .005 ---		INCH METRIC		TITLE	
2 PLACE ± .01 ± 0.13		---		SALES ASSEMBLY	
1 PLACE --- ± 0.25		---		EBBI VERTICAL RECEPTACLE	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MOLEX INCORPORATED		40 CKT FIBRE CHANNEL CONN	
DRWG. BY: RAN		CHK'D. BY: RAN		SHEET NO. DATE	
APP'D. BY: GWF		SCALE: 4: 1		U.S.A. 1 OF 2 7/21/95	
FILE NAME: S71743X4		SEE TABLE		SDA-71743-104*	
SHEET NO. DATE		DIV. C		SIZE	
U.S.A. 1 OF 2 7/21/95		MOLX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION		C C	



SECTION X-X  
SCALE - 10:1



RECOMMENDED PC BOARD LAYOUT  
COMPONENT SIDE

G	SEE SHEET 1
---	-------------

DIMENSIONS SHOWN (METRIC) INCH		▽ = 0		= 0		REVISE ONLY ON CAD SYSTEM	
UNLESS OTHERWISE SPECIFIED TOLERANCES ANGULAR ± 1/2°		TITLE		SALES ASSEMBLY		ECCI VERTICAL RECEPTACLE	
INCH METRIC		3 PLACE ± .005 ---		MOLEX INCORPORATED		SHEET NO. DATE	
2 PLACE ± .01 ± 0.13		1 PLACE --- ± 0.25		L15LE,ILL. 60532 U.S.A.		2 7/21/95	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		PART NO.		DRWG. NO.		SEE TABLE SDA-71743-104	
DRWG. BY RAN		CHK'D. BY RAN		FILE NAME		DIV. SIZE	
APP'D. BY GWF		SCALE 4:1		ST1743X4		C C	
				THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.			

71743