

**FEATURES AND SPECIFICATIONS**

**Features and Benefits**

- Meets SCA-2 Enhanced Single Connector Attach specifications for small form factor disk drives
- Metal retention clips for mechanical hold down before and after processing
- Blind-mate guide ears on ends with integral ESD grounding contacts
- Staggered "hot plug" first-mate/last-break contacts
- Mates to standard .062" PC board card edge with low insertion force
- Surface Mount Compatible

**Reference Information**

Product Specification: PS-73826-0000  
 Packaging: Tray  
 UL File No.: E29179  
 CSA File No.: LR19980-239A  
 Mates With: [87012](#), [87571](#) and [87572](#)  
 Designed In: Inches

**Electrical**

Voltage: 30V  
 Current: 1.0A  
 Contact Resistance: 20mΩ max.  
 Dielectric Withstanding Voltage: 500V AC  
 Insulation Resistance: 1000 MΩ min.

**Mechanical**

Contact Retention to Housing: 500g min.  
 Mating Force: 90g max.  
 Unmating Force: 15g min.  
 Normal Force: 90g  
 Durability: 500 cycles min.

**Physical**

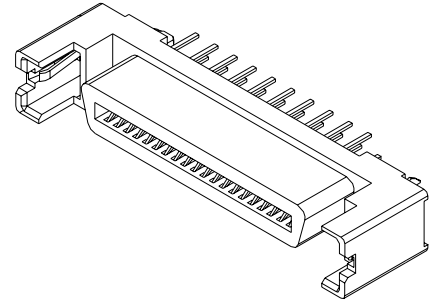
Housing: High-temperature thermoplastic, UL 94V-0  
 Retention Clip: Copper Alloy  
 Contact: Copper Alloy  
 Plating: 30μ" min. Gold over Nickel in contact area,  
 100μ" min. Tin/Lead over Nickel on tails  
 Operating Temperature: -40 to +105°C



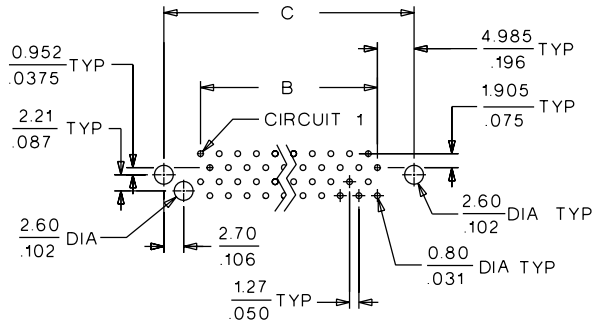
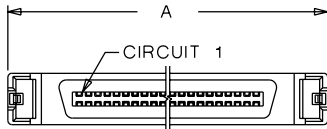
**1.27mm (.050") Pitch  
 EBBI™ 50D  
 Receptacle**

**71743**

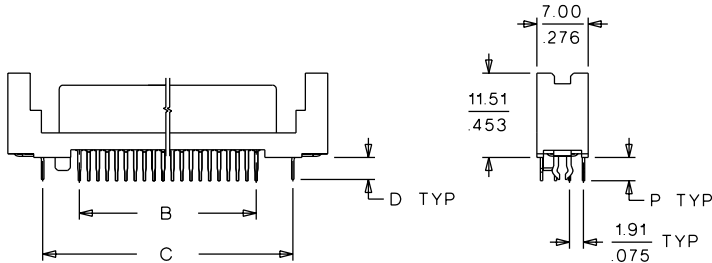
**Vertical  
 SCA-2**



**CATALOG DRAWING (FOR REFERENCE ONLY)**



PCB LAYOUT: COMPONENT SIDE



**ORDERING INFORMATION AND DIMENSIONS**

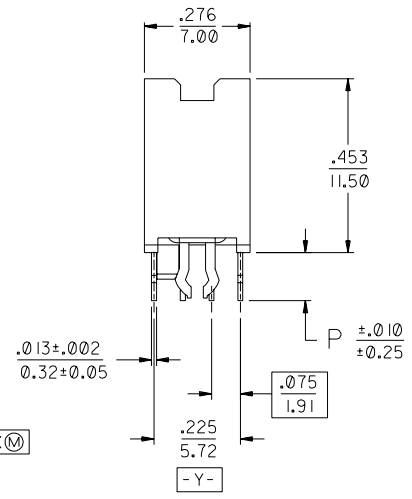
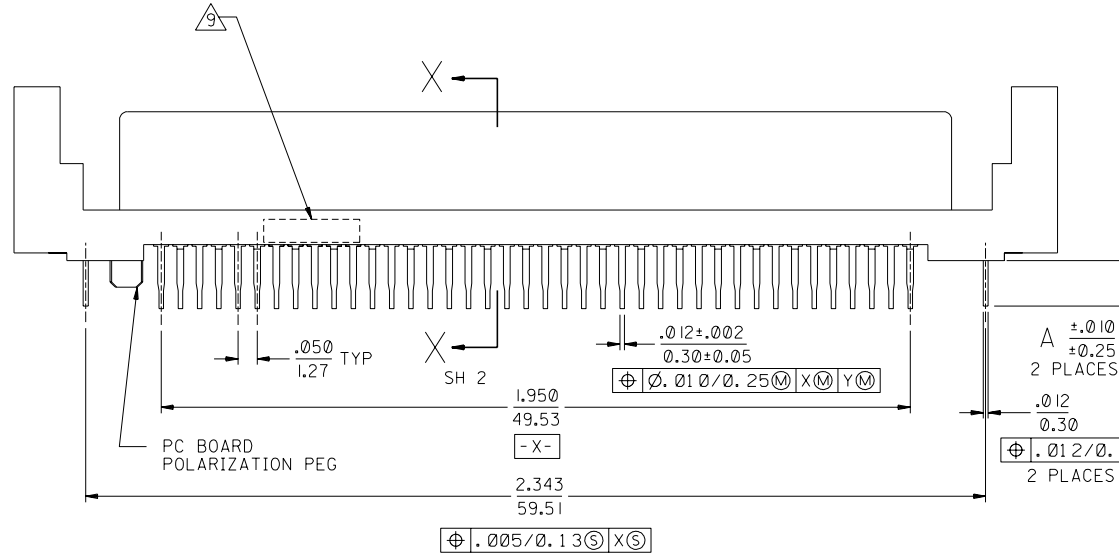
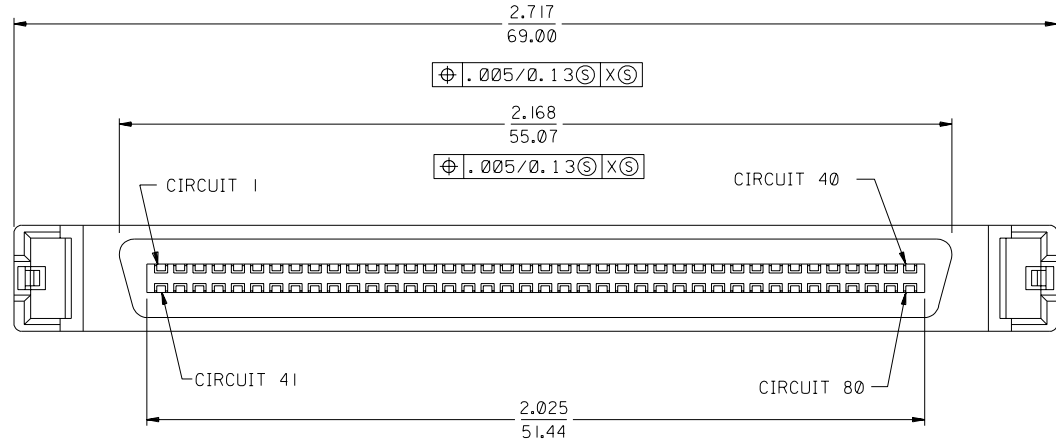
Circuits	Order No.	Dimension				
		A	B	C	D	P
40	• 71743-1040	43.60 (1.717)	24.13 (.950)	34.11 (1.343)	3.00 (.118)	3.18 (.125)
	• 71743-1041	43.60 (1.717)	24.13 (.950)	34.11 (1.343)	3.00 (.118)	2.79 (.110)
	• 71743-1042	43.60 (1.717)	24.13 (.950)	34.11 (1.343)	2.24 (.088)	1.78 (.070)
	• 71743-1044	43.60 (1.717)	24.13 (.950)	34.11 (1.343)	3.00 (.118)	3.40 (.134)
	• 71743-1045	43.60 (1.717)	24.13 (.950)	34.11 (1.343)	3.00 (.118)	3.75 (.148)
80	• 71743-1080	69.00 (2.717)	49.53 (1.950)	59.51 (2.343)	3.00 (.118)	3.18 (.125)
	• 71743-1081	69.00 (2.717)	49.53 (1.950)	59.51 (2.343)	3.00 (.118)	2.79 (.110)
	• 71743-1082	69.00 (2.717)	49.53 (1.950)	59.51 (2.343)	2.24 (.088)	1.78 (.070)
	• 71743-1084	69.00 (2.717)	49.53 (1.950)	59.51 (2.343)	3.00 (.118)	3.40 (.134)
	• 71743-1085	69.00 (2.717)	49.53 (1.950)	59.51 (2.343)	3.00 (.118)	3.75 (.148)
	• 71743-1086	69.00 (2.717)	49.53 (1.950)	59.51 (2.343)	4.37 (.172)	3.18 (.125)

• US Standard Product, available through Molex franchised distributors

71743

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) MIN. GOLD IN CONTACT AREA AND  
.000100/(0.00254) MIN. TIN-LEAD IN TAIL AREA OVER  
NICKEL OVERALL.  
ESD METAL PEGS:  
.000150/(0.00381) MIN. TIN-LEAD OVER  
NICKEL OVERALL.
- 3) PLATING OPTION 2:  
TERMINALS:  
GOLD FLASH IN SELECT CONTACT AREA OVER  
.000030/(0.00076) MIN. PALLADIUM NICKEL IN CONTACT AREA AND  
.000075/(0.00191) MIN. TIN-LEAD IN TAIL AREA OVER  
NICKEL OVERALL.  
ESD METAL PEGS:  
.000150/(0.00381) MIN. TIN-LEAD OVER  
NICKEL OVERALL.
- 4) CONFORMS TO PRODUCT SPECIFICATION PS-73826-0000.
- 5) CIRCUIT NUMBERS 1, 36 THRU 43, 45, 46, AND 75 THRU 80,  
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.



H	REVISD ECN UCP2003-0093 BBARKER 02/08/13
G	REVISD ECN UDT 2000-1231 ACHAMMER 00-06-07
F3	REVISD ECN UDT 1999-0975 ACHAMMER 99-05-11
F2	REVISD ECN UDT 1999-0865 ACHAMMER 99-04-09
F1	REVISD ECN UDT1998-0294 STANISLA 98-06-10
F	REVISD PER ECN U80654 ACHAMMER 97-9-18
E	REVISD PER ECN U71495 ACHAMMER 97-6-2
DI	REVISD PER ECN U70444 ACHAMMER 96-11-26
D	REVISD PER ECN U61278 5-2-96 DGA
C	REVISD PER ECN U61122 3-22-96 RAN
B	REVISD PER ECN U60641 11-29-95 DRS
A	INITIAL RELEASE PER ECN U60019 8-15-95 RAN

71743-1086	OBSOLETE				
71743-1085	SEE NOTE 2	.130±.006 (3.30±0.15)	.118 (3.00)	.148 (3.75)	
71743-1084	SEE NOTE 2	.125±.006 (3.18±0.15)	.118 (3.00)	.134 (3.40)	
71743-1083	SEE NOTE 2	.093±.006 (2.36±0.15)	.118 (3.00)	.125 (3.18)	
71743-1082	OBSOLETE				
71743-1081	SEE NOTE 2	.062±.006 (1.60±0.15)	.118 (3.00)	.110 (2.79)	
71743-1080	SEE NOTE 2	.093±.006 (2.36±0.15)	.118 (3.00)	.125 (3.18)	
PART NUMBER	PLATING	PCB THICKNESS	DIM. A	DIM. P	

SALES ASSEMBLY  
EBBI VERTICAL RECEPTACLE  
80 CKT SCA-2 CONNECTOR

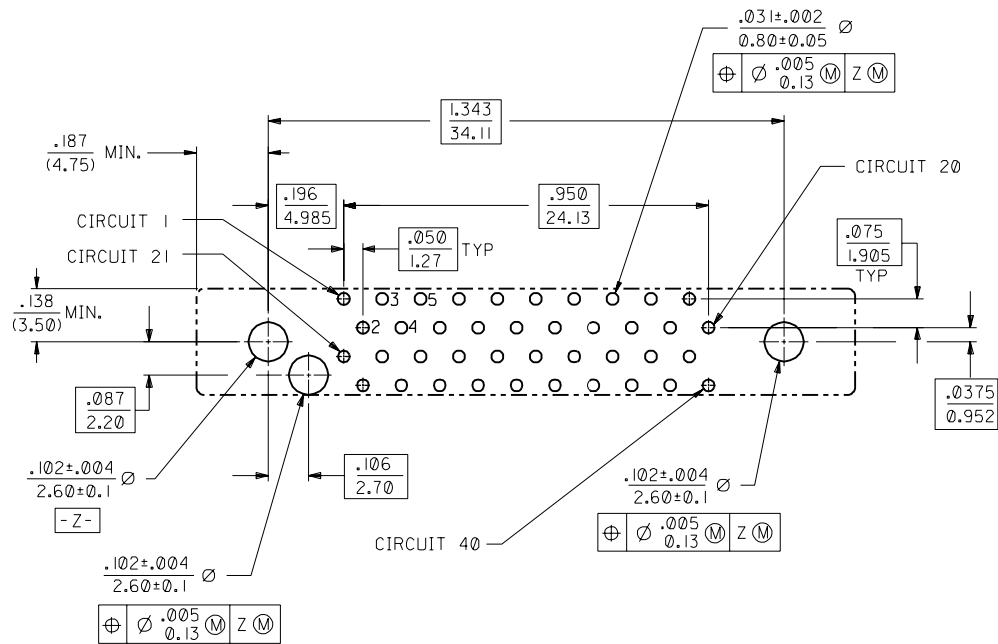
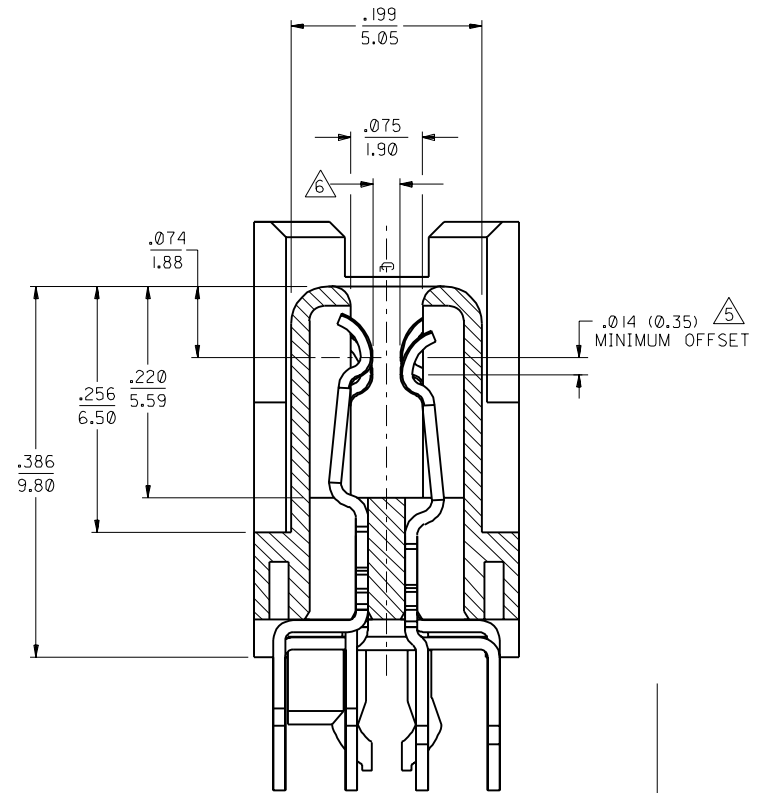
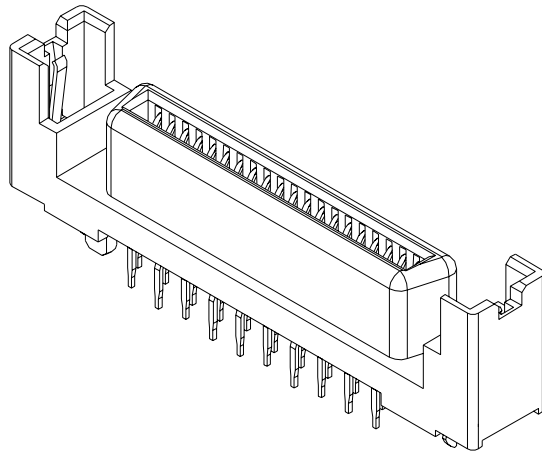
MOLEX INCORPORATED  
LITSE, ILL. 60532 U.S.A.

DATE: 7/21/95

SEE TABLE SDA-71743-108\*

DRWG. NO. 4:1





71743

SEE SHEET 1

DIMENSIONS SHOWN (METRIC) INCH		REVISIONS	
UNLESS OTHERWISE SPECIFIED TOLERANCES ANGULAR $\pm 1/2^\circ$		MFG. SH.	REV.
INCH METRIC		LTR.	REV.
3 PLACE $\pm .005$	---	REVISIONS	
2 PLACE $\pm .01$	$\pm 0.13$	G SEE SHEET 1	
1 PLACE ---	$\pm 0.25$	G	
DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS		MFG. SH. REV. LTR. REV.	
PART NO. DRWG. NO.		SALES ASSEMBLY	
FILE NAME		EBBI VERTICAL RECEPTACLE	
71743X4		40 CKT FIBRE CHANNEL CONN	
502		MOLEX INCORPORATED	
SCALE 4:1		SHEET NO. DATE	
BY RAN		2 7/21/95	
CHK'D BY RAN		U.S.A.	
SCALE 4:1		69532	
BY GWF		SEE TABLE SDA-71743-104	
SCALE 4:1		THIS DRAWING CONTAINS INFORMATION THAT IS PROPRIETARY TO MOLEX INC. AND SHOULD NOT BE USED WITHOUT WRITTEN PERMISSION.	