

.020" [0.50] CENTERLINE
.031" [0.80] CENTERLINE
.039" [1.00] CENTERLINE
.049" [1.25] CENTERLINE
PCA SERIES

INTRODUCTION:

Adam Tech PCA Series Flexible Printed Circuit (FPC) and Flexible Flat Cable (FFC) connectors are ZIF (zero insertion force) designed to be a fast easy method to make a reliable connection of flexible printed circuits to a PCB. Adam Tech's special contact design completely preserves conductor integrity by eliminating all wiping action while making connection. Flex circuitry enters the connector and the connector cap is pressed down to capture the flex circuit producing a stable, high pressure connection. Raising the cap releases the pressure for exchange or replacement of circuitry. This series includes single and dual row versions in thru-hole or SMT mounting in vertical or horizontal orientations.

FEATURES:

Superior contact design protects conductors
 High pressure contacts
 Single or dual row versions
 Choice of .020", .031", .039" and .049" centerlines

MATING FPC & FFC:

Mates with .020", .031", .039" and .049" centerline flat flexible circuits with thickness range of 0.1mm to 0.3mm

SPECIFICATIONS:

Material:

Insulator: LCP, Glass reinforced, rated UL94V-0
 Insulator color: Natural
 Contacts: Phosphor Bronze

Contact Plating:

Tin over copper underplate overall

Electrical:

Operating voltage: 100V AC max.
 Current rating: .020" Spacing: 0.4 Amps max.
 .031" & .039" Spacing: 0.5 Amps max
 .049" Spacing: 1 Amp max
 Contact resistance: 30 mΩ max. initial
 Insulation resistance: 500 MΩ min.
 Dielectric withstanding voltage: 500V AC for 1 minute

Mechanical:

Insertion Force: 0 oz max
 Withdrawal Force: 13 oz min

Temperature Rating:

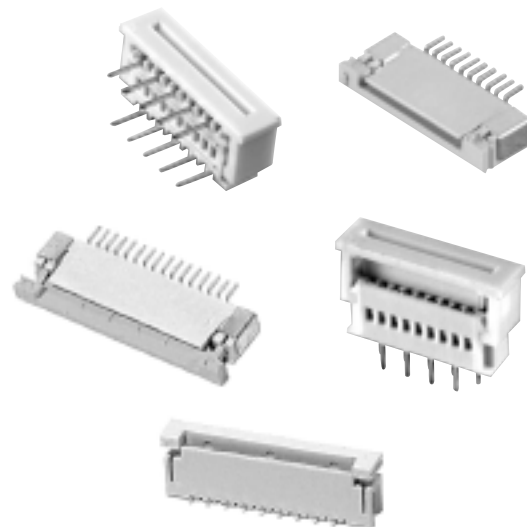
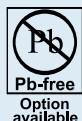
Operating temperature: -40°C to +85°C

PACKAGING:

Anti-ESD plastic tubes or Tape and Reel

APPROVALS AND CERTIFICATIONS:

UL Recognized File No. E224053
 CSA Certified File No. LR1578596



ORDERING INFORMATION

PCA	1	10	V	3	20
SERIES INDICATOR PCA = ZIF Flex Circuit Connector			ENTRY ANGLE V = Top entry (.049" thru-hole only) HL = Side entry, lower contact HU = Side entry, upper contact		PCB ROW SPACING 20 = 2.0mm 45 = 4.5mm 50 = 5.0mm
CENTERLINES 1 = .049" centerline thru-hole contacts 2 = .039" centerline surface mount leads 3 = .039" centerline thru-hole 4 = .049" centerline SMT 5 = .031" centerline SMT 6 = .020" centerline SMT		POSITIONS 03 thru 30		FLEX CIRCUIT THICKNESS 1 = 0.1mm (SMT) 2 = 0.2mm (SMT) 3 = 0.3mm (standard for all types)	

OPTIONS:

Add designator(s) to end of part number
 TR = Tape and reel packaging
 RC = RoHS compliant lead-free product with Hi-Temp insulator

ADAM TECH ZIF FLEX CIRCUIT CONNECTOR

ADAM TECHNOLOGIES

.020" [0.50] & .031" [0.80] CENTERLINE
PCA SERIES

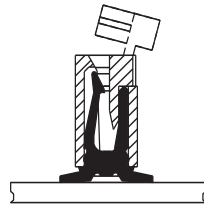
CONTACT SECTION VIEWS



UPPER CONTACT

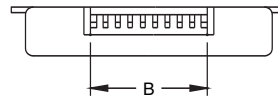


LOWER CONTACT

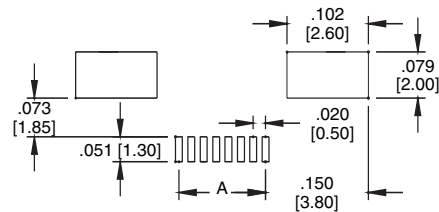
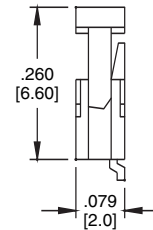
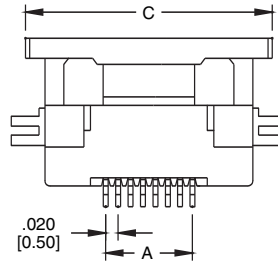


VERTICAL MOUNT

SIDE ENTRY .020" CENTERLINE SMT



PCA-6-16-HU-3



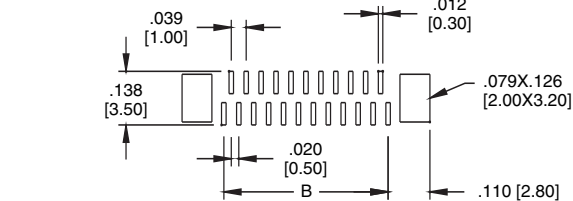
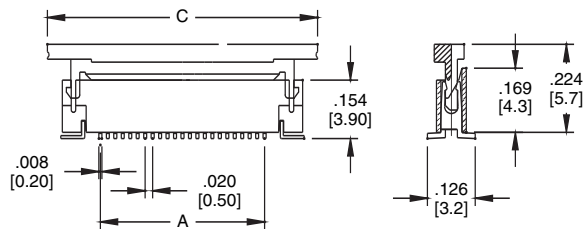
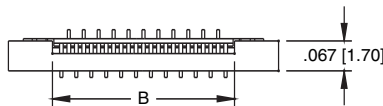
Recommended PCB Layout

A = .020 [0.50] X No. of Spaces
B = A + .045 [1.14]
C = A + .189 [6.60]

TOP ENTRY .020" CENTERLINE SMT



PCA-6-18-V-3



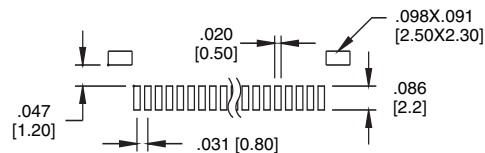
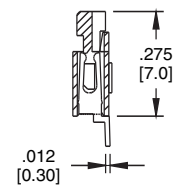
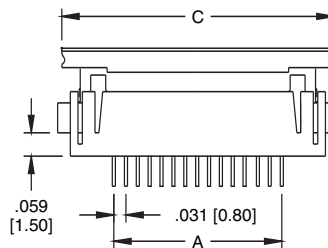
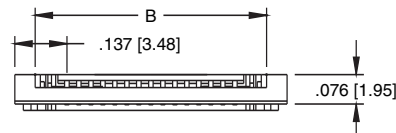
Recommended PCB Layout

A = .031 [0.80] X No. of Spaces
B = A + .081 [2.05]
C = A + .279 [7.10]

SIDE ENTRY .031" CENTERLINE SMT



PCA-5-24-HU-3



Recommended PCB Layout

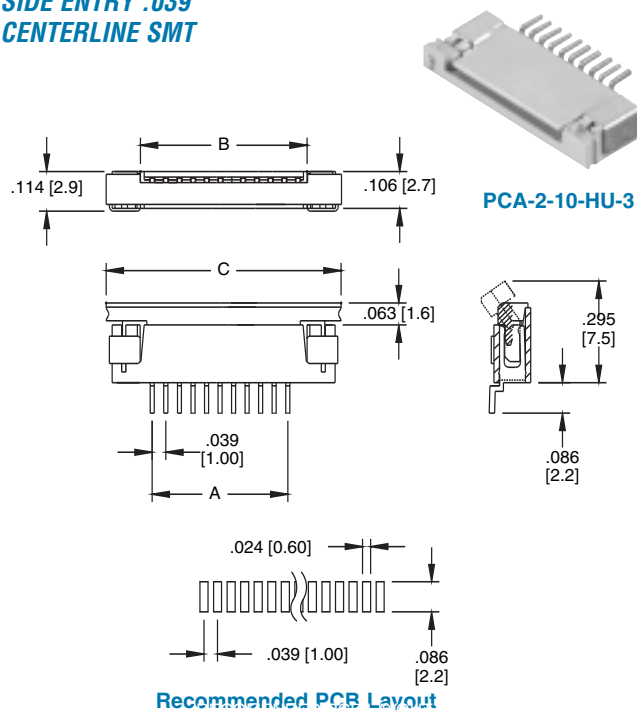
A = .031 [0.80] X No. of Spaces
B = A + .081 [2.05]
C = A + .228 [5.80]

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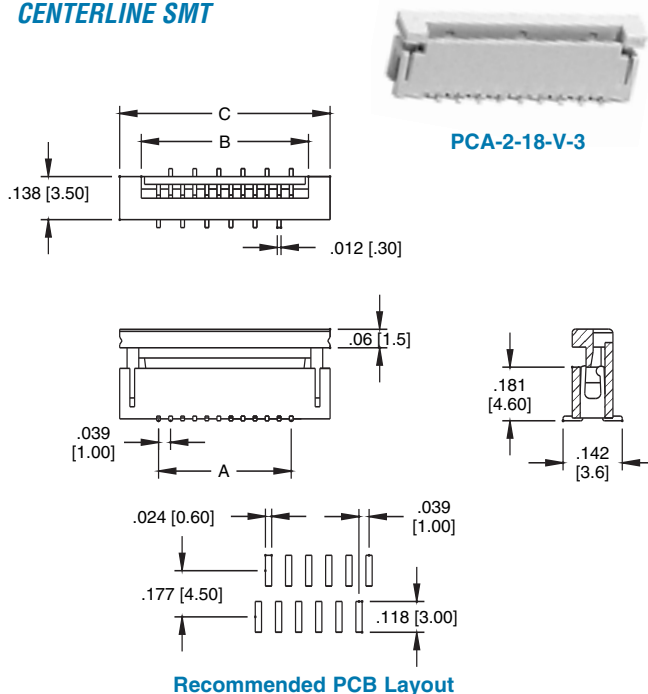
.039" [1.00] & .049" [1.25] CENTERLINE
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SIDE ENTRY .039" CENTERLINE SMT



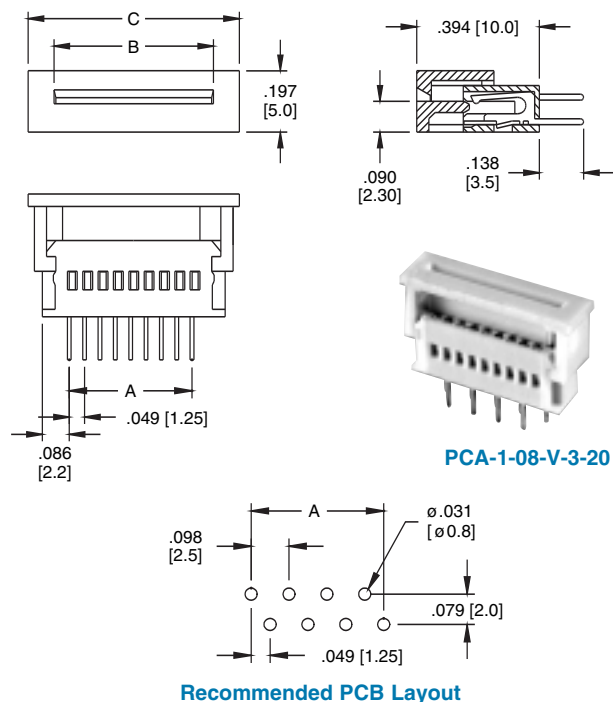
A = .039 [1.00] X No. of Spaces
B = A + .090 [2.30]
C = A + .80 [7.10]

TOP ENTRY .039" CENTERLINE SMT



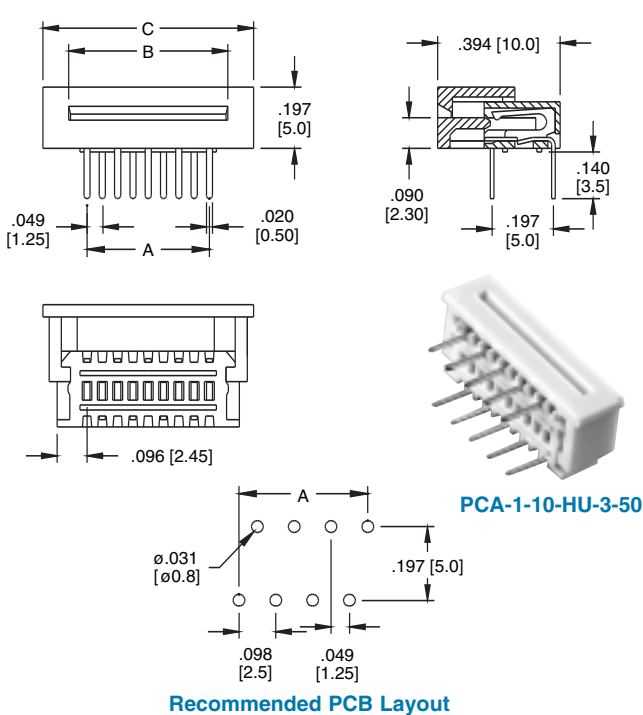
A = .039 [1.00] X No. of Spaces
B = A + .090 [2.30]
C = A + .280 [7.10]

TOP ENTRY .049" CENTERLINE THRU-HOLE



A = .049 [1.25] X No. of Spaces
B = A + .106 [2.70]
C = A + .303 [7.70]

SIDE ENTRY .049" CENTERLINE THRU-HOLE



A = .049 [1.25] X No. of Spaces
B = A + .106 [2.70]
C = A + .303 [7.70]