ADAM TECH
Adam Technologies, Inc.

ZIF FLEX CIRCUIT CONNECTOR

0.3mm [.012"] CENTERLINE
0.5mm [.020"] CENTERLINE
0.8mm [.031"] CENTERLINE
1.0mm [.039"] CENTERLINE
1.25mm [.049"] CENTERLINE
PCA SERIES

INTRODUCTION:
Adam Tech PCA Series Flexible Printed Circuit (FPC) and Flexible Flat Cable (FFC) connectors are ZIF (zero insertion force) connectors designed to provide a fast, easy, reliable method to make a 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 .3mm, .5mm, .8mm, 1mm & 1.25mm centerlines

MATING FPC & FFC:
Mates with .3mm, .5mm, .8mm, 1mm & 1.25mm centerline flat flexible circuits with thickness range of 0.1mm to 0.3mm

SPECIFICATIONS:

Material:
Hi-Temp 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
Soldering process temperature: 260°C

PACKAGING:
Anti-ESD plastic tubes or Tape and Reel

APPROVALS AND CERTIFICATIONS:
UL Recognized & CSA Certified, File no. E224053

c UL us
RoHS COMPLIANT
HI-TEMP INSULATOR AVAILABLE

ORDERING INFORMATION

PCA	1	10	V	3	20

SERIES INDICATOR
PCA = ZIF Flex Circuit Connector

TYPE
1 = 1.25mm centerline thru-hole
2 = 1.00mm centerline SMT (body height 2.70mm)
2B = 1.00mm centerline SMT (body height 1.2mm)
3 = 1.00mm centerline thru-hole
4 = 1.25mm centerline SMT
5 = .8mm centerline SMT
6 = .5mm centerline SMT (body height 2.0mm)
6A = .5mm centerline SMT (body height 1.5mm)
6B = .5mm centerline SMT (body height 1.2mm)
6C = .5mm centerline SMT (body height 1.0mm)
7 = .3mm centerline SMT

POSITIONS
03 thru 30

ENTRY ANGLE
V = Top entry
HL = Side entry, lower contact
HU = Side entry, upper contact

FLEX CIRCUIT THICKNESS
3 = 0.1mm – 0.3mm (standard for all types)

PCB ROW SPACING
20 = 2.0mm
Leave blank for SMT

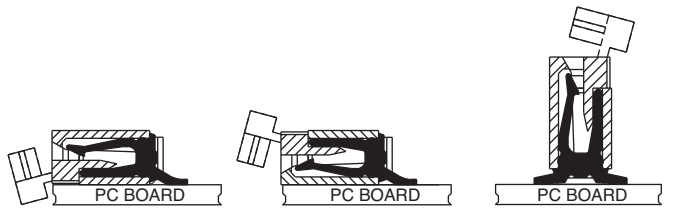
OPTIONS:
Add designator(s) to end of part number
TR = Tape and reel packaging

ZIF FLEX CIRCUIT CONNECTOR

0.5mm [.020"] CENTERLINE

PCA SERIES

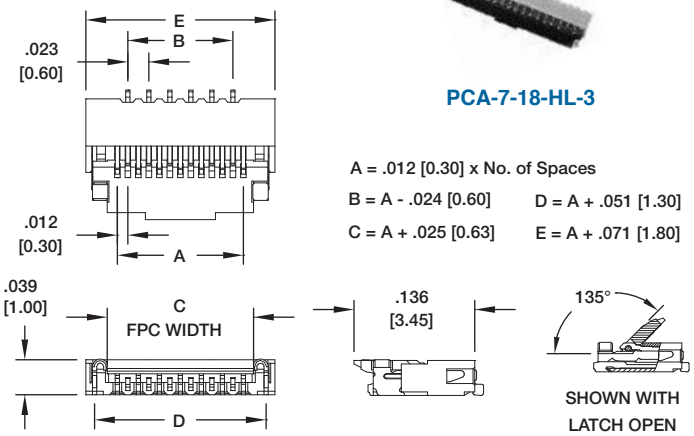
CONTACT SECTION VIEWS



UPPER CONTACT | LOWER CONTACT | VERTICAL MOUNT

PCA-7
.3mm (.012") SIDE ENTRY SMT

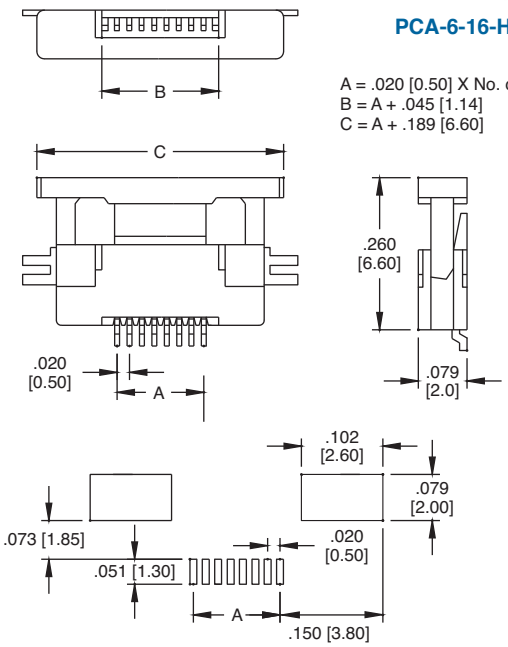
PCA-7-18-HL-3



A = .012 [0.30] x No. of Spaces
B = A - .024 [0.60]
C = A + .025 [0.63]
D = A + .051 [1.30]
E = A + .071 [1.80]

PCA-6
.5mm (.020") SIDE ENTRY SMT

PCA-6-16-HU-3

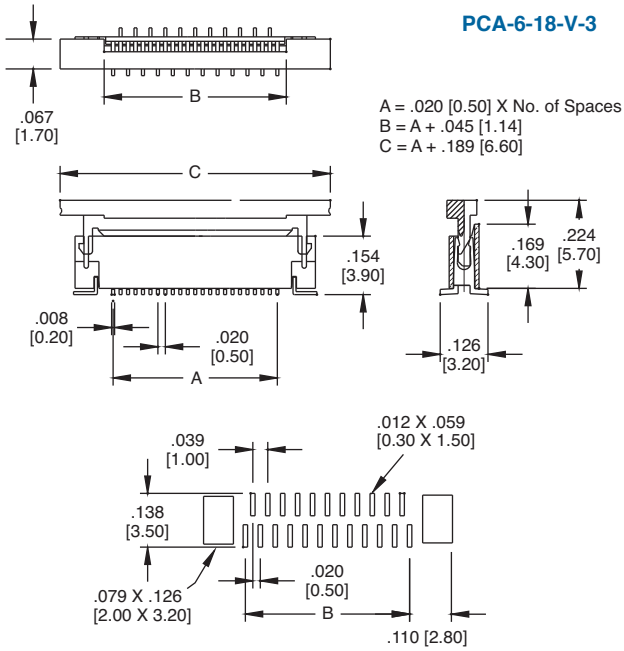


A = .020 [0.50] X No. of Spaces
B = A + .045 [1.14]
C = A + .189 [6.60]

Recommended PCB Layout

PCA-6
.5mm (.020") TOP ENTRY SMT

PCA-6-18-V-3

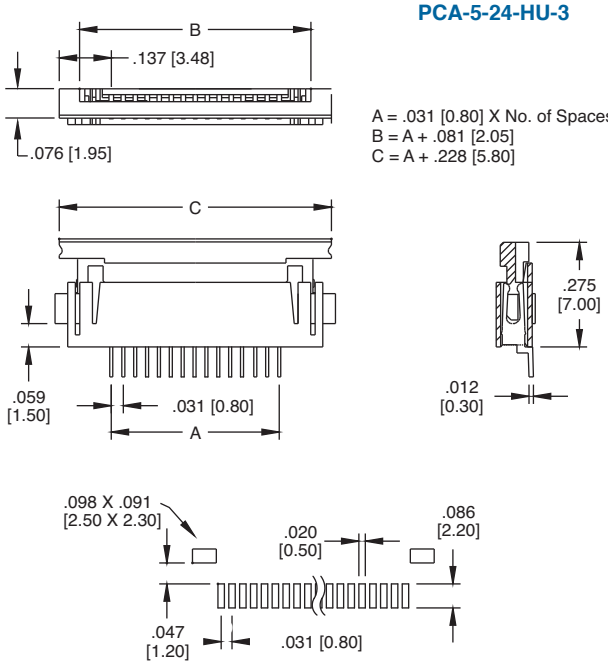


A = .020 [0.50] X No. of Spaces
B = A + .045 [1.14]
C = A + .189 [6.60]

Recommended PCB Layout

PCA-5
.8mm (.031") SIDE ENTRY SMT

PCA-5-24-HU-3



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

Recommended PCB Layout

ZIF FLEX CIRCUIT CONNECTOR

1.0mm [.039"] & 1.25mm [.049"] CENTERLINE

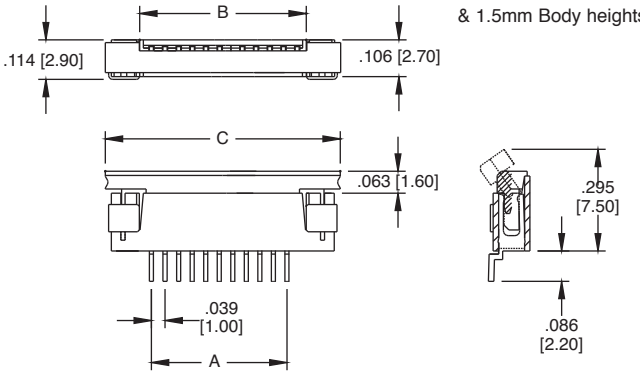
PCA SERIES

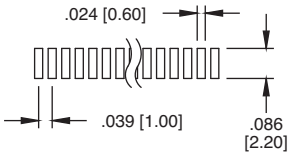
PCA-2
1.00mm (.039")
SIDE ENTRY SMT

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

PCA-2-10-HU-3

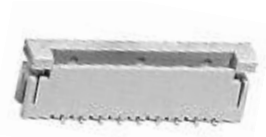
Also Available in 1.2mm & 1.5mm Body heights





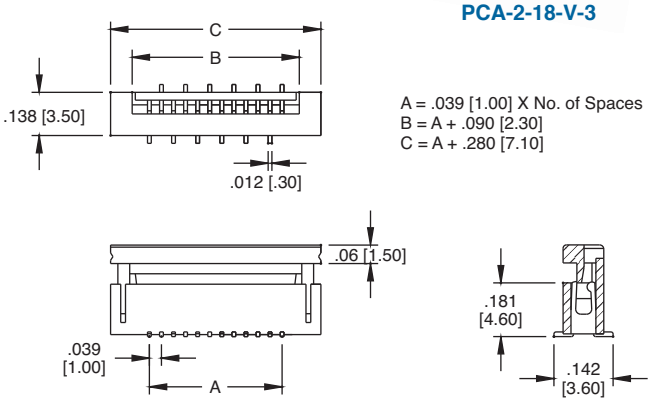
Recommended PCB Layout

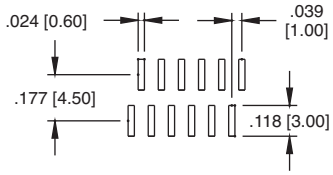
PCA-2
1.00mm (.039")
TOP ENTRY SMT



PCA-2-18-V-3

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

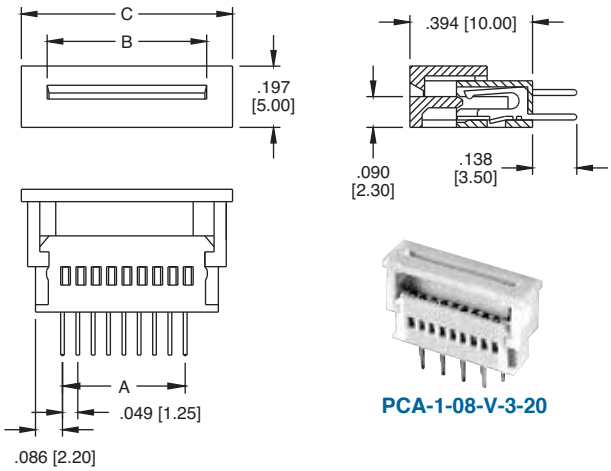




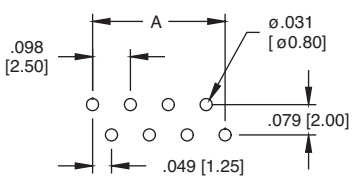
Recommended PCB Layout

PCA-1
1.25mm (.049")
TOP ENTRY THRU HOLE

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



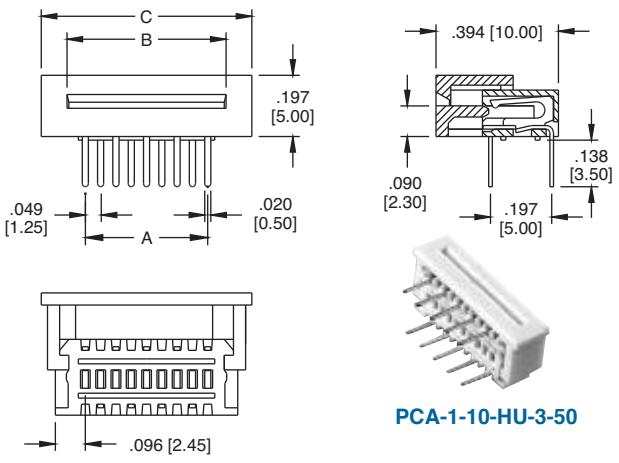
PCA-1-08-V-3-20



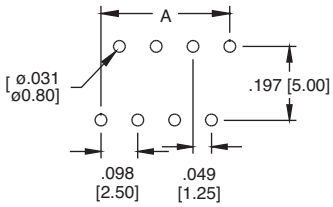
Recommended PCB Layout

PCA-1
1.25mm (.049")
TOP ENTRY THRU HOLE

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



PCA-1-10-HU-3-50



Recommended PCB Layout

909 Rahway Avenue • Union, New Jersey 07083 • T: 908-687-5000 • F: 908-687-5710 • WWW.ADAM-TECH.COM