

INTRODUCTION:

Adam Tech PH Series .100" Pin Headers offer a full range headers in a variety of configurations including Single, Dual and Three rows, Straight or Right Angle in Thru-Hole or SMT mounting. Their close tolerance .025" sq. posts are smoothly finished and taper tipped to eliminate insertion damage to the PCB or mating connector. Adam Tech Pin Headers can be easily cut into exact sizes as required. Options include stacked insulator versions and choice of tin, gold or selective gold plating. This series is compatible with all industry standard .100" pitch pin headers.

FEATURES:

- Single, Dual or Three Row
- Tin, gold or selective gold plating options
- Thru-hole or SMT mounting
- Stacked and Custom length versions available
- Versatile Breakaway design
- Hi Temp Insulator available

MATING RECEPTACLES:

Mates with all industry standard receptacles accepting a .025" square post on .100" [2.54mm] centerlines

SPECIFICATIONS:

Material:

Insulator: PBT, glass reinforced, rated UL94V-0
Optional Hi-Temp insulator: Nylon 6T, rated UL94V-0
Insulator Color: Black
Contacts: Brass

Plating:

U = Gold flash (30u" optional) over nickel underplate
SG = Gold flash (30u" optional) over nickel underplate on contact area, tin over copper underplate on tails.
T = Tin over copper underplate overall

Electrical:

Operating voltage: 250V AC max.
Current rating: 3 Amps max
Contact resistance: 20 mΩ max. initial
Insulation resistance: 5000 MΩ min.
Dielectric withstanding voltage: 1000V AC for 1 minute

Mechanical:

Insertion force: 2 oz lbs max.
Withdrawal force: .75 oz lbs min
Mating durability: 1000 cycles min.

Temperature Rating:

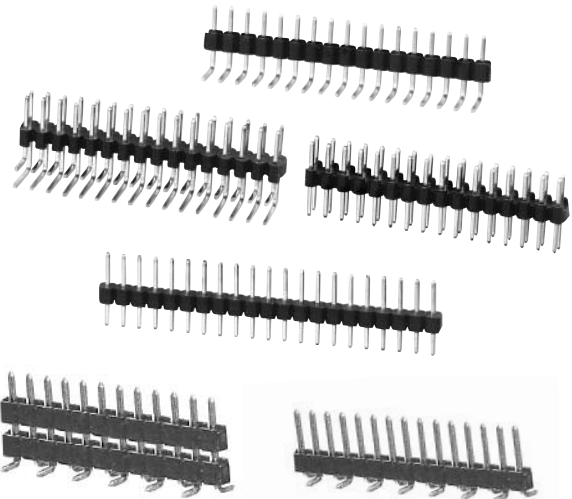
Operating temperature: -55°C to +105°C
Soldering process temperature:
Standard insulator: 235°C
Hi-Temp insulator: 260°C

PACKAGING:

Anti-ESD plastic bags

SAFETY AGENCY APPROVALS:

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



ORDERING INFORMATION

PH1	40	U	A
SERIES INDICATOR			
PH1 = Single Row, Straight			
PH1RA = Single Row, Right Angle, High Profile			
PH1RB = Single Row, Right Angle, Low Profile			
PH2 = Dual Row, Straight			
PH2RA = Dual Row, Right Angle			
PH3 = Three Row, Straight			
PH3RA = Three Row, Right Angle			
POSITIONS			
PH1: 1 thru 40			
PH2: 2 thru 80			
PH3: 3 thru 120			
MATING/TAIL LENGTH			
A = Mating Length ("C" dim.) = .235" Solder Tail ("D" dim.) = .120"			
B = Mating Length ("C" dim.) = .318" Solder Tail Length ("D" dim.) = .120" Special lengths available contact factory			
PLATING			
U = Gold flash overall			
V = 15 μin gold on mating area 100 μin tin on solder tail			
W = 30 μin gold on mating area 100 μin tin on solder tail			
T = 100 μin tin overall			
SG = Gold flash on mating area 100 μin tin lead on solder tail			

OPTIONS:

Add designator(s) to end of part number

SMT = Surface mount leads Dual row with Hi-Temp insulator

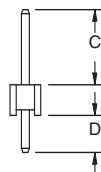
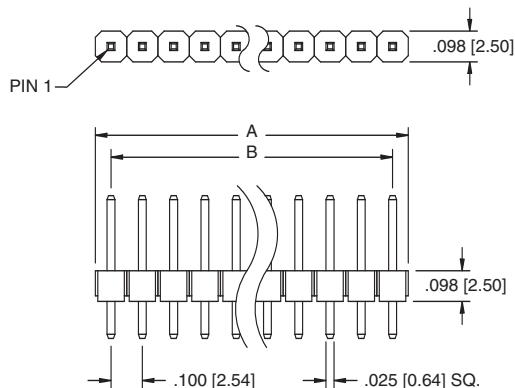
SMT-A = Surface mount leads Type A with Hi-Temp insulator

SMT-B = Surface mount leads Type B with Hi-Temp insulator

HT = Hi-Temp insulator for Hi-Temp soldering processes up to 260°C (Add this option for thru-hole products only.)

All SMT products are manufactured with Hi-Temp insulators)

A = .100 [2.54] X No. of Positions.
B = .100 [2.54] X No. of Spaces.

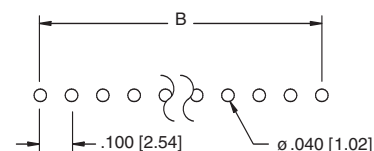


PH1
SINGLE ROW

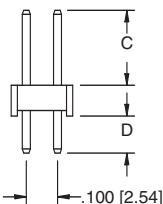
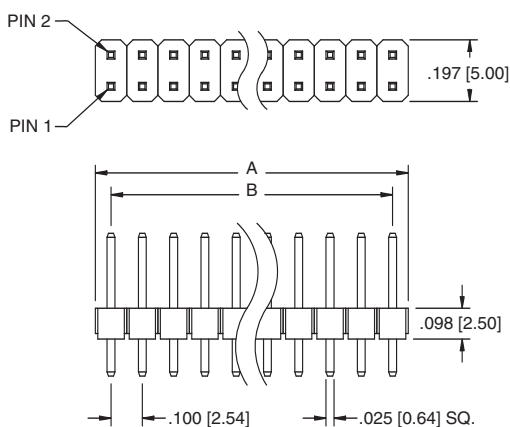


PH1-16-UA

Recommended PCB Layout



A = .100 [2.54] X No. of Positions per row.
B = .100 [2.54] X No. of Spaces.

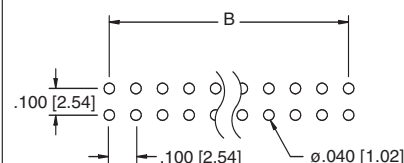


PH2
DUAL ROW

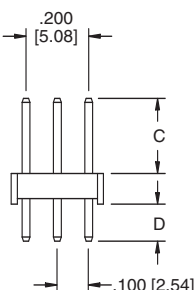
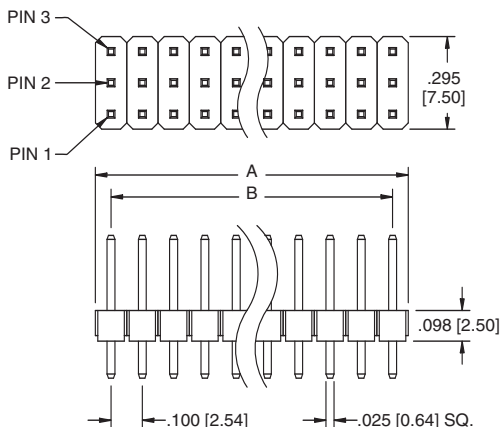


PH2-32-UA

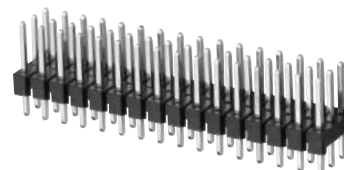
Recommended PCB Layout



A = .100 [2.54] X No. of Positions per row.
B = .100 [2.54] X No. of Spaces.

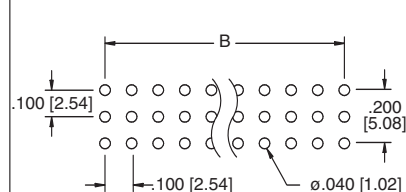


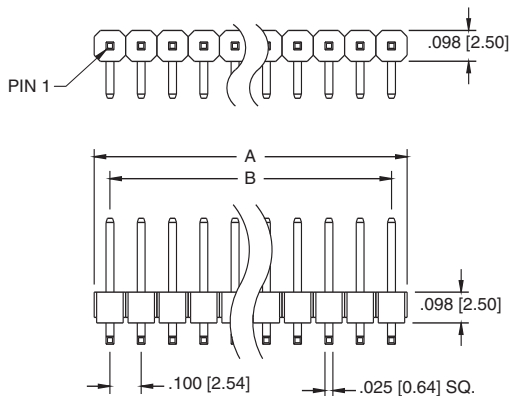
PH3
TRIPLE ROW



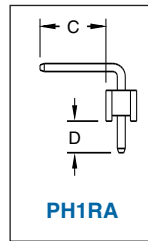
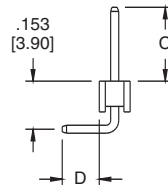
PH3-48-UA

Recommended PCB Layout





A = .100 [2.54] X No. of Positions.
B = .100 [2.54] X No. of Spaces.



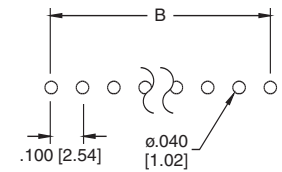
PH1RA

PH1RB
SINGLE ROW

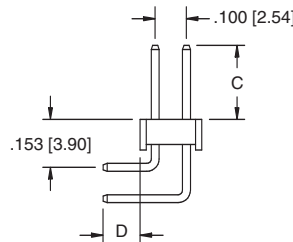
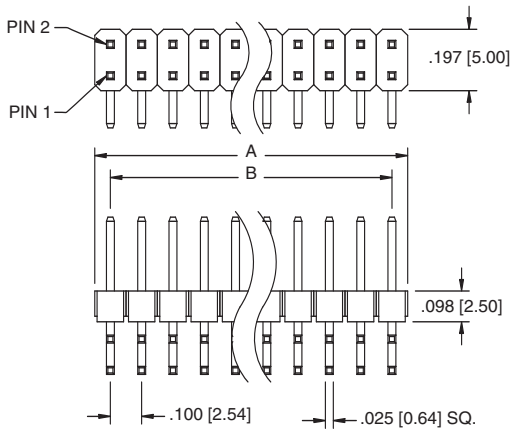


PH1RB-16-UA

Recommended PCB Layout

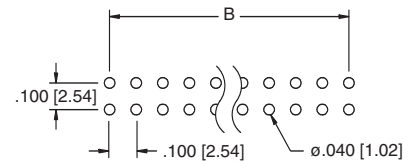


A = .100 [2.54] X No. of Positions per row.
B = .100 [2.54] X No. of Spaces.

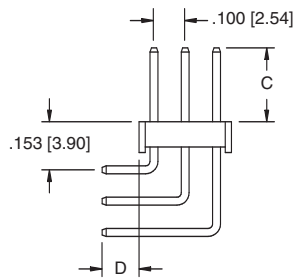
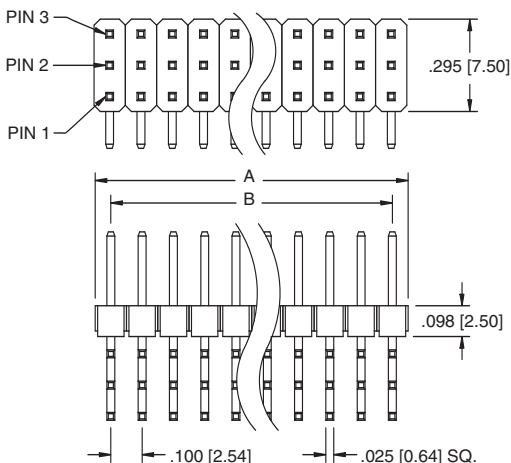


PH2RA-32-UA

Recommended PCB Layout

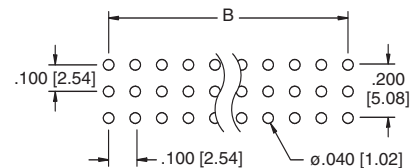


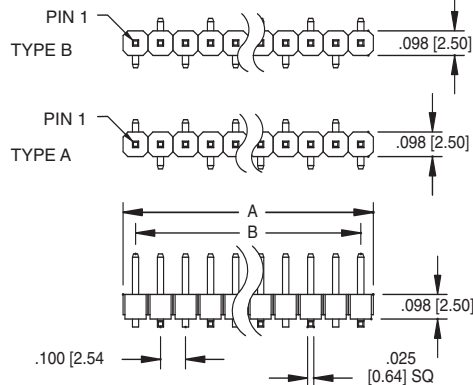
A = .100 [2.54] X No. of Positions per row.
B = .100 [2.54] X No. of Spaces.



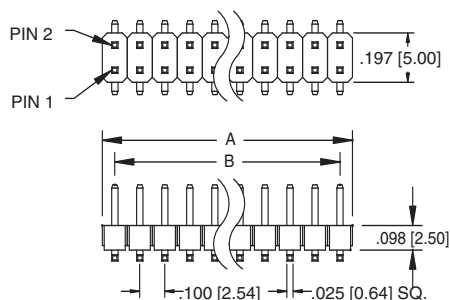
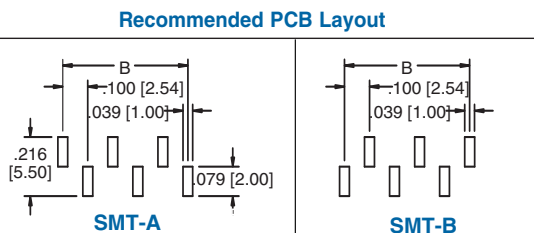
PH3RA-48-UA

Recommended PCB Layout

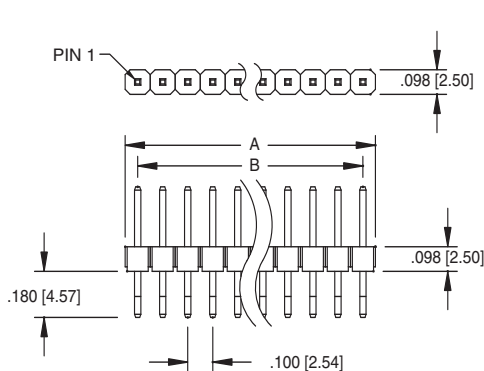
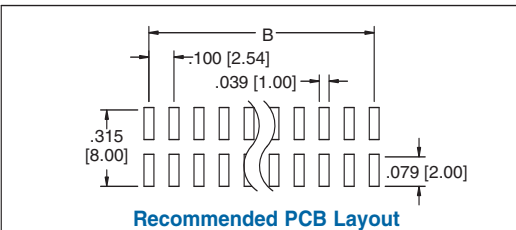




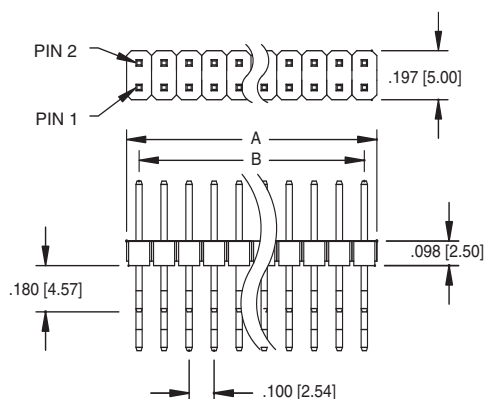
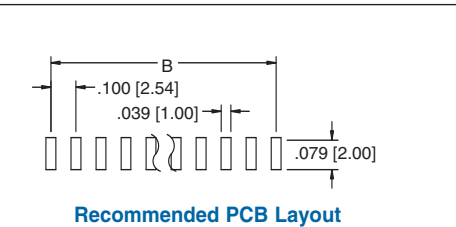
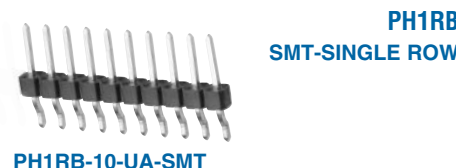
A = .100 [2.54] X No. of Positions.
B = .100 [2.54] X No. of Spaces.



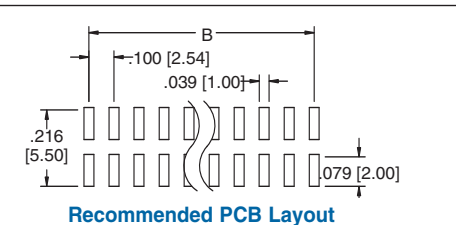
A = .100 [2.54] X No. of Positions per row.
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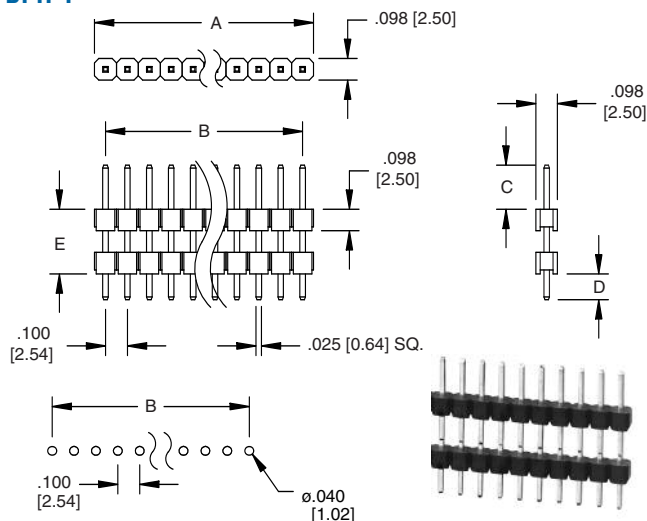
A = .100 [2.54] X No. of Positions.
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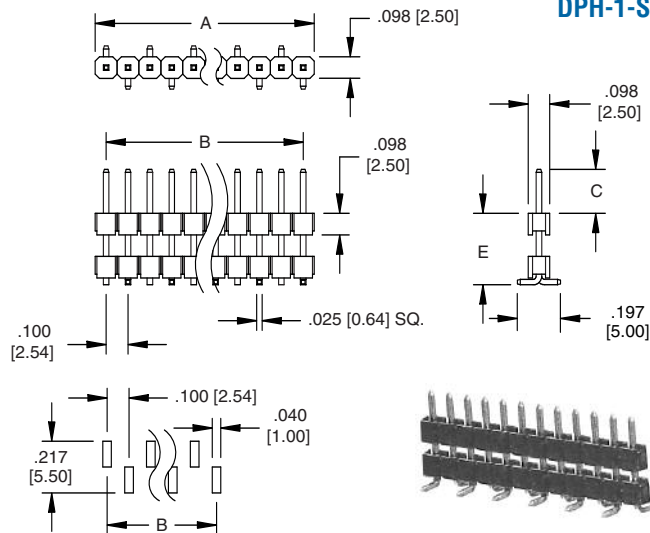
DPH-1



Recommended PCB Layout

DPH-1-10-U-.220/.100/.350

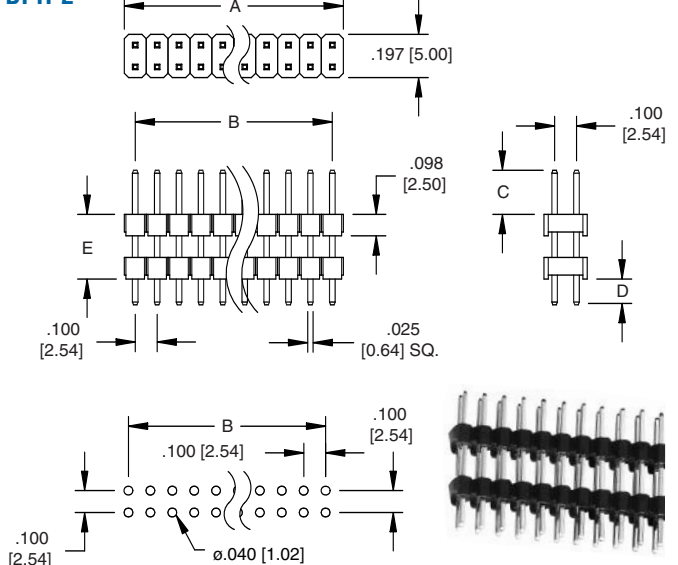
DPH-1-SMT



Recommended PCB Layout

DPH-1-12-U-.200/SMT/.220-A

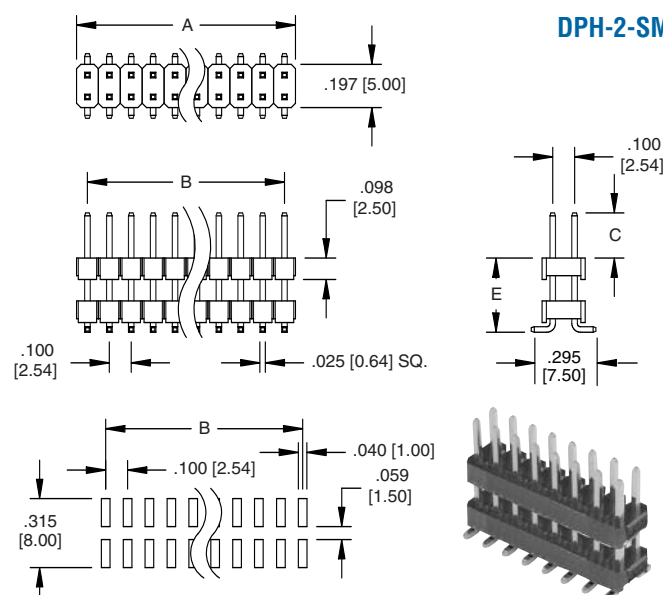
DPH-2



Recommended PCB Layout

DPH-2-22-U-.220/.100/.350

DPH-2-SMT



Recommended PCB Layout

DPH-2-16-U-.250/SMT/.300

ORDERING INFORMATION

DPH

SERIES INDICATOR
DPH = Dual insulator
.100" centerline

2

NO. OF ROWS
1 = Single row
2 = Dual row
3 = Triple row

20

POSITIONS
1 thru 40 (single row)
4 thru 80 (dual row)
3 thru 120 (triple row)

SG

PLATING
U = Gold plated
T = Tin plated
SG = Gold plating in contact area, tin plating on solder tails

.XXX"/.XXX"/.XXX"
(C DIM) (D DIM) (E DIM)

SPECIFIED IN INCHES AS:
C Dim. / D Dim. / E Dim.
(replace D Dim. with SMT for surface mount option)