

INTRODUCTION:

Adam Tech 0.8mm and 1.00mm Pin Header and Female Header series is a fine pitch, low profile, dual row, PCB mounted connector set intended for limited space applications or where total weight is a factor. Our specially tooled insulators and contacts maintain consistent high quality through our automated production processes. Each series is available in thru-hole PCB or SMT mounting and plated tin, gold or selective gold as specified.

FEATURES:

0.8mm and 1.0mm versions
Pin Header and Female Header set
Lightweight and Compact
Hi Temp Insulators

MATING OPTIONS:

Mates with all industry standard 0.8mm & 1.0mm pitch headers and female headers

SPECIFICATIONS:

Material:

Standard Hi-Temp insulator: Nylon 6T, rated UL94V-0

Insulator Color: Black

Contacts: Phosphor Bronze

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: 1 Amp max

Contact resistance: 20 mΩ max. initial

Insulation resistance: 5000 MΩ min.

Dielectric withstanding voltage: 1000V AC for 1 minute

Mechanical:

Mating durability: 500 cycles min.

Temperature Ratings:

Operating temperature: -40°C to +105°C

Max process temp: 230°C for 30 ~ 60 seconds
(260°C for 10 seconds)

Soldering process temperature: 260°C

PACKAGING:

Anti-ESD plastic bags or tubes

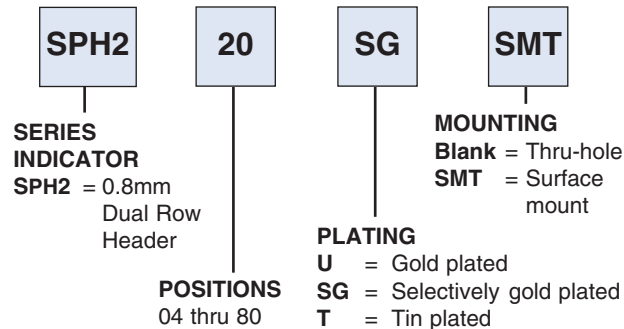
APPROVALS AND CERTIFICATIONS:

UL Recognized File No. E224053

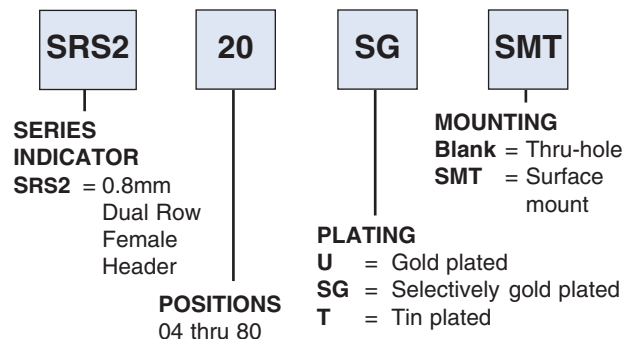
CSA Certified File No. LR1578596



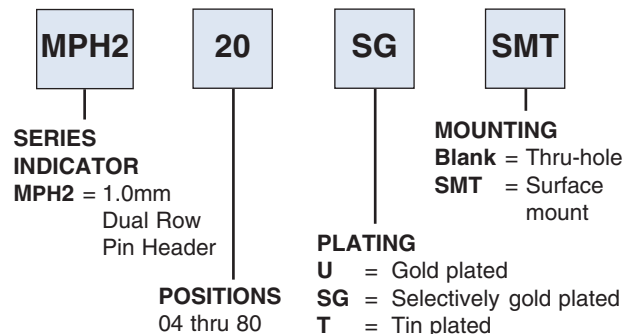
0.8mm MALE ORDERING INFORMATION



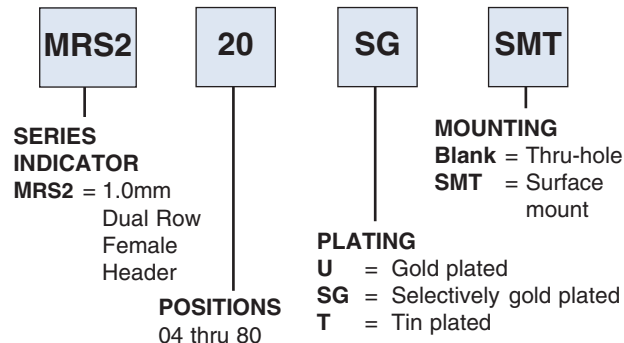
0.8mm FEMALE ORDERING INFORMATION



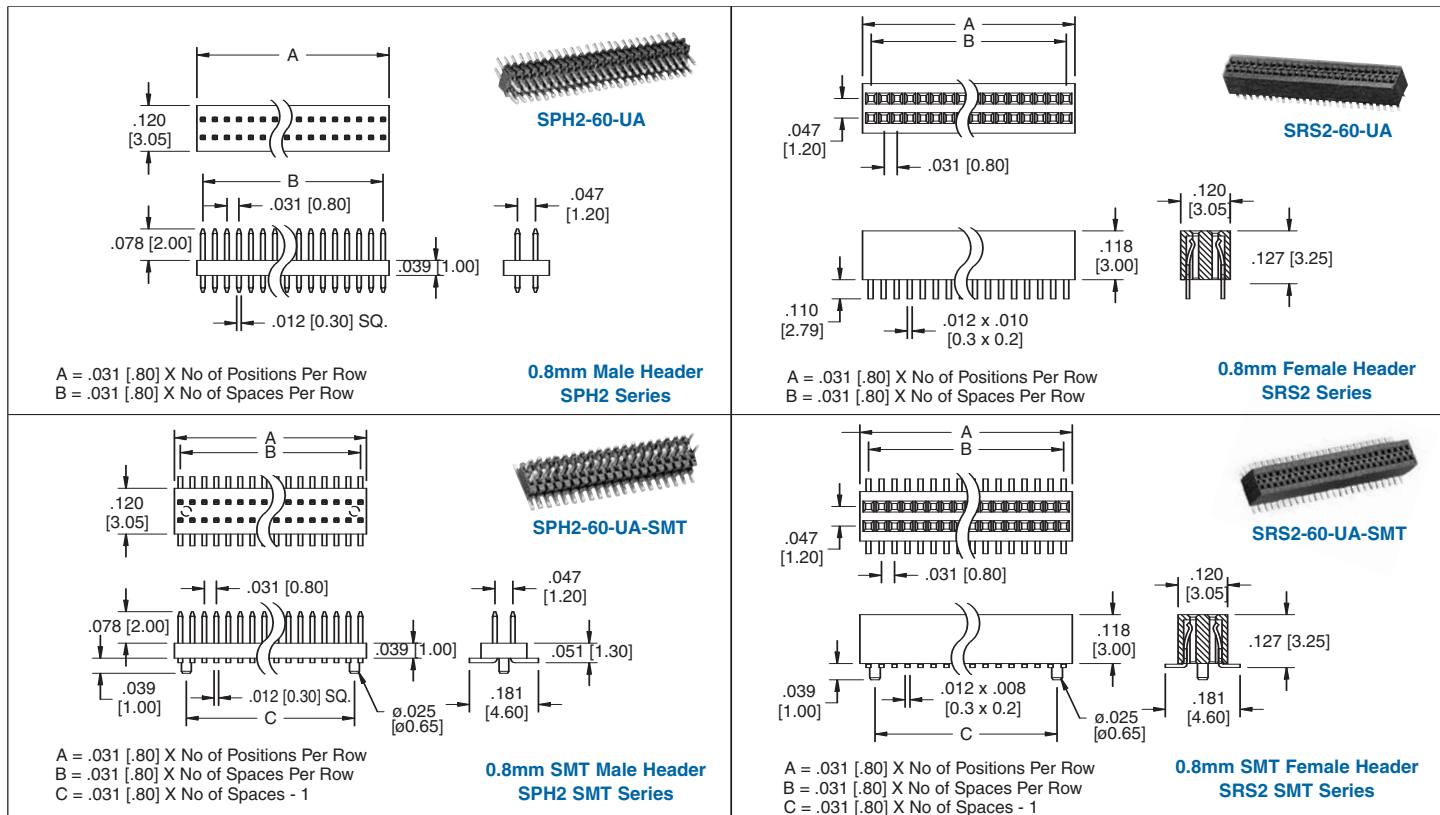
1.0mm MALE ORDERING INFORMATION



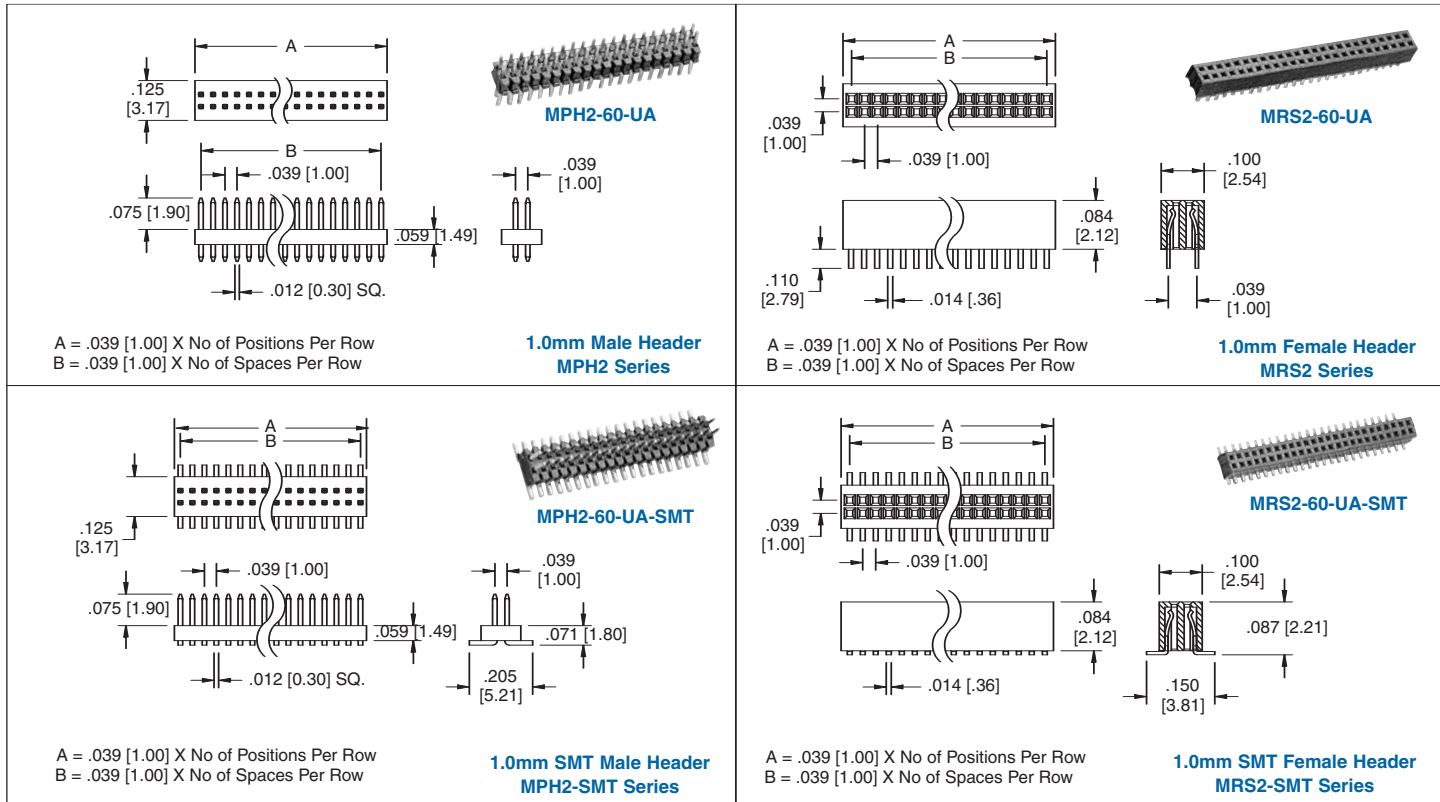
1.0mm FEMALE ORDERING INFORMATION



0.8mm SUB-MICRO HEADERS



1.0mm MICRO HEADERS



INTRODUCTION:

Adam Tech .050" HPH Series Pin Headers are fine pitched, low profile, PCB mounted pin headers intended for limited space applications or where overall size is a factor. Our specially tooled insulators and contacts offer consistent high quality through automated production processes. This series offers an extensive range of single, dual and stacked versions. Each is available in thru-hole PCB or SMT mounting with choice of tin, gold or selective gold plating.

FEATURES:

- Single and Dual Row
- Stacked, Thru-Hole and SMT mounting
- Pin Header and Female Header sets
- Lightweight and Compact
- Hi Temp Insulator available
- Choice of plating

MATING OPTIONS:

Mates with all industry standard .050" [1.27mm] pitch female headers designed for use with 0.4mm Sq. pins and Low profile receptacle

SPECIFICATIONS:

Material:

Standard Hi-Temp insulator: Nylon 6T or Nylon 46, rated UL94V-0
Insulator Color: Black

Contacts: Brass or Phosphor Bronze

Plating:

U = Gold flash over nickel underplate overall
SG = Gold flash 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: 1 Amp max
Contact resistance: 20 mΩ max. Initial
Insulation resistance: 5000 MΩ min.
Dielectric withstanding voltage: 1000V AC for 1 minute

Mechanical:

Mating durability: 500 Cycles min.

Temperature Rating:

Operating temperature: -40°C to +105°C
Soldering process temperature: 260°C

PACKAGING:

Anti-ESD plastic bags

APPROVALS AND CERTIFICATIONS:

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



OPTIONS:

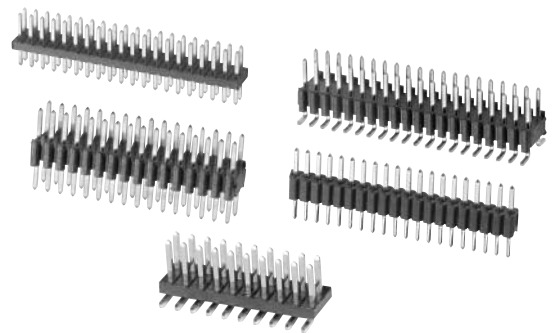
Add designator(s) to end of part number

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)

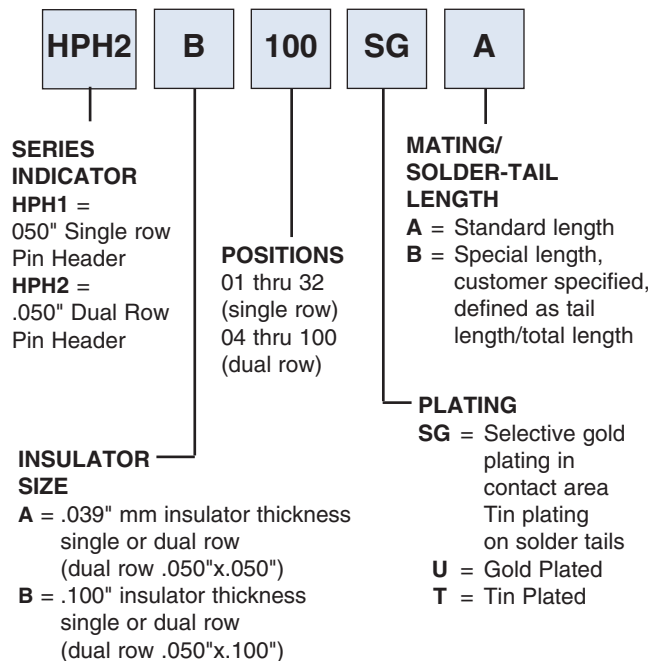
SMT = Dual Row Surface Mount leads with Hi-Temp insulator for Hi-Temp soldering processes up to 260°C

SMT-A = Single Row Surface Mount Leads Type A

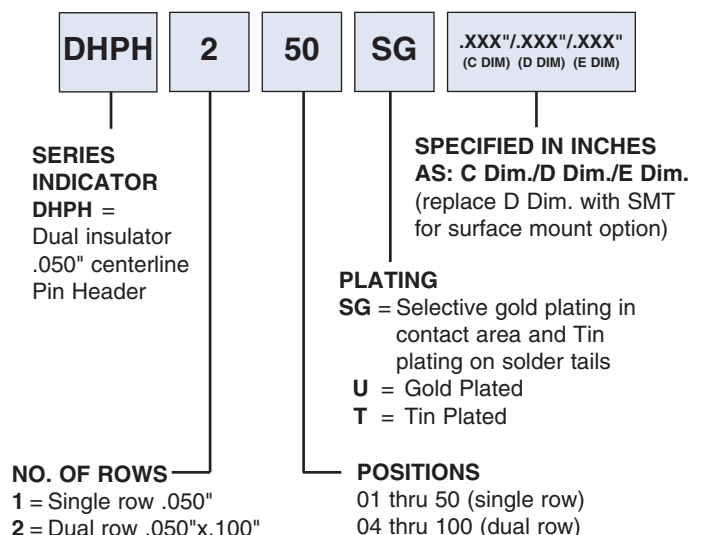
SMT-B = Single Row Surface Mount Leads Type B



ORDERING INFORMATION

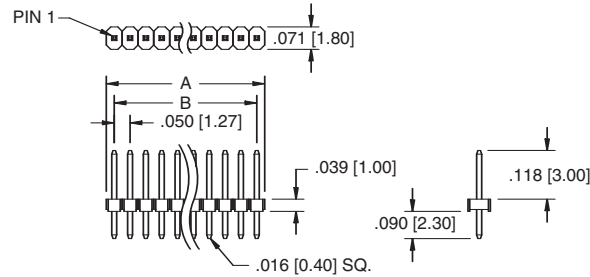
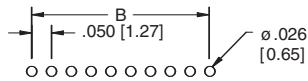


ORDERING INFORMATION



A = .050 [1.27] X No. of Positions
B = .050 [1.27] X No. of Spaces

Recommended PCB Layout



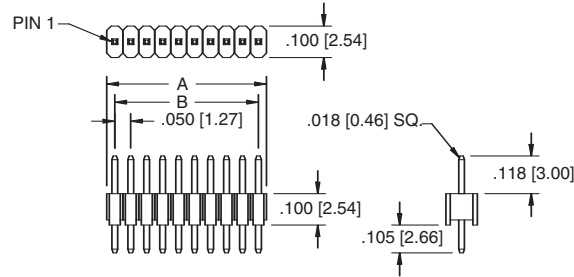
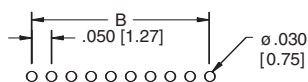
HPH1-A SINGLE ROW STRAIGHT WITH 1.00mm INSULATOR



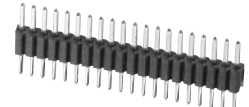
HPH1-A-20-UA

A = .050 [1.27] X No. of Positions
B = .050 [1.27] X No. of Spaces

Recommended PCB Layout



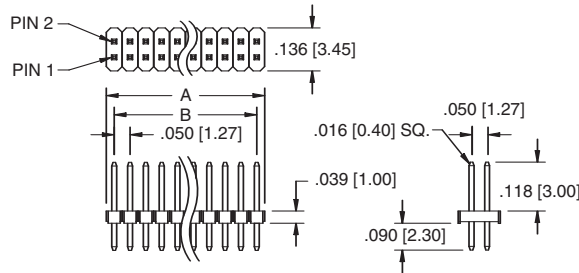
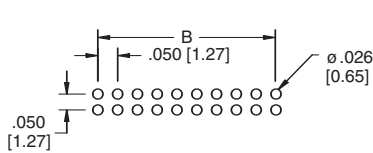
HPH1-B SINGLE ROW STRAIGHT WITH .100" INSULATOR



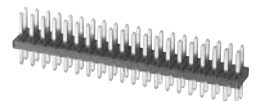
HPH1-B-20-UA

A = .050 [1.27] X No. of Positions per row
B = .050 [1.27] X No. of Spaces

Recommended PCB Layout



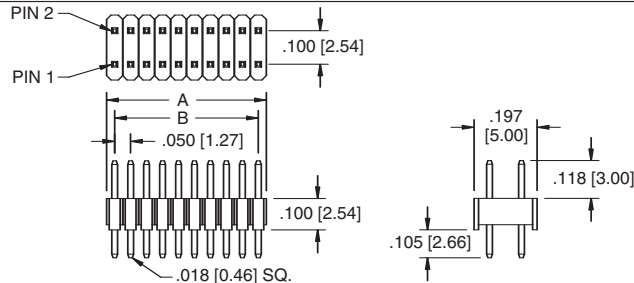
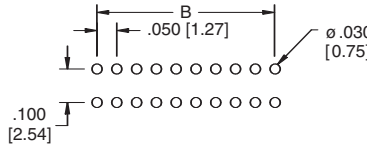
HPH2-A DUAL ROW STRAIGHT WITH 1.00mm INSULATOR



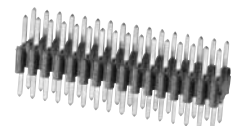
HPH2-A-40-UA

A = .050 [1.27] X No. of Positions per row
B = .050 [1.27] X No. of Spaces

Recommended PCB Layout



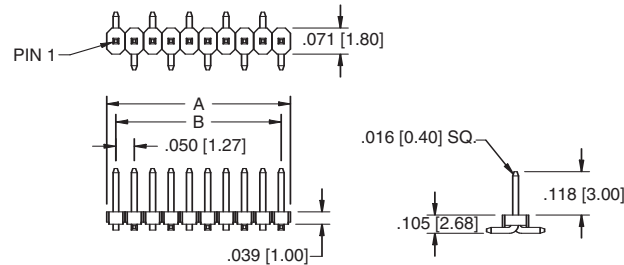
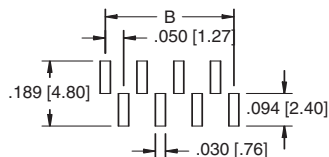
HPH2-B DUAL ROW STRAIGHT WITH .100" INSULATOR



HPH2-B-40-UA

A = .050 [1.27] X No. of Positions
B = .050 [1.27] X No. of Spaces

Recommended PCB Layout



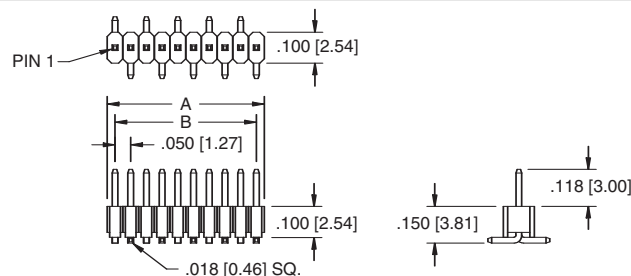
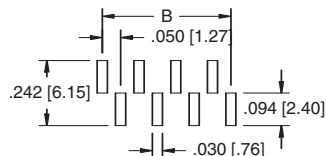
HPH1-A (SMT) SINGLE ROW STRAIGHT SMT WITH 1.00mm INSULATOR



HPH1-A-20-UA-SMT

A = .050 [1.27] X No. of Positions
B = .050 [1.27] X No. of Spaces

Recommended PCB Layout



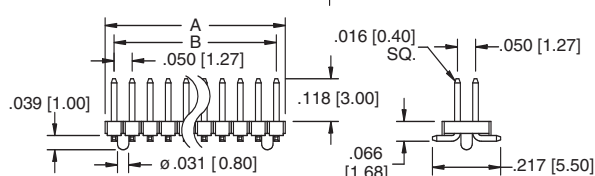
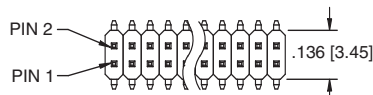
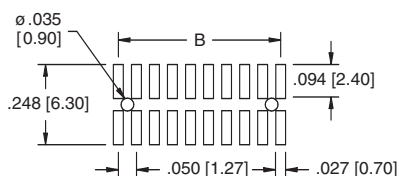
HPH1-B (SMT) SINGLE ROW STRAIGHT SMT WITH .100" INSULATOR



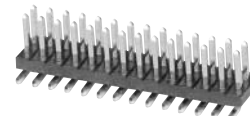
HPH1-B-20-UA-SMT

A = .050 [1.27] X No. of Positions per row
B = .050 [1.27] X No. of Spaces

Recommended PCB Layout



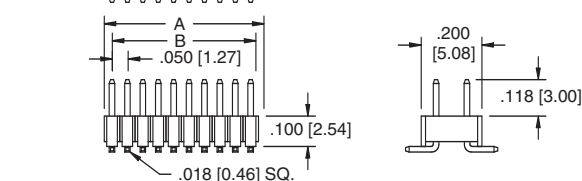
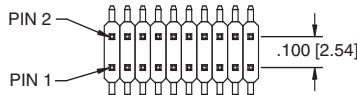
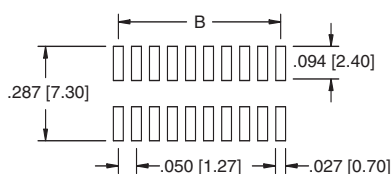
HPH2-A (SMT)



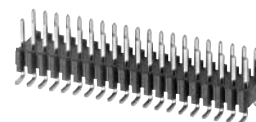
HPH2-A-40-UA-SMT

A = .050 [1.27] X No. of Positions per row
B = .050 [1.27] X No. of Spaces

Recommended PCB Layout



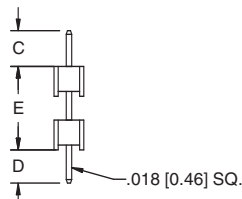
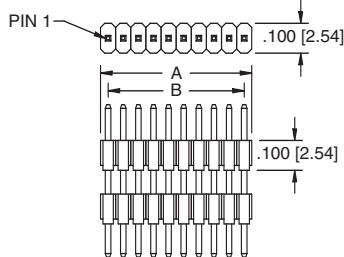
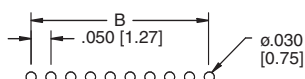
HPH2-B (SMT)



HPH2-B-40-UA-SMT

A = .050 [1.27] X No. of Positions
B = .050 [1.27] X No. of Spaces

Recommended PCB Layout



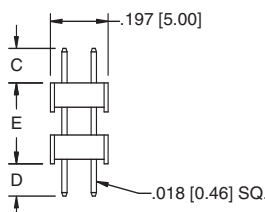
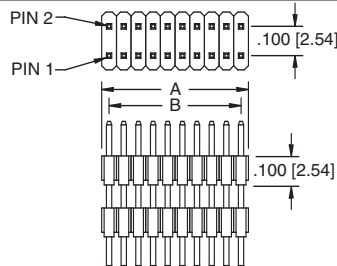
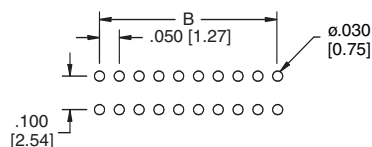
DHPH-1



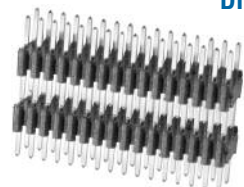
DHPH-1-20-U-.079/.079/.354

A = .050 [1.27] X No. of Positions per row
B = .050 [1.27] X No. of Spaces

Recommended PCB Layout



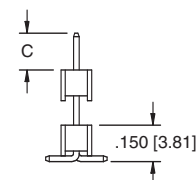
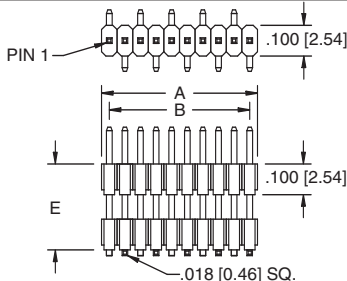
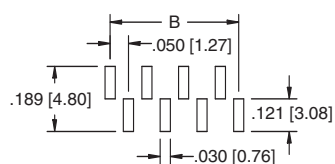
DHPH-2



DHPH-2-32-U-.079/.079/.354

A = .050 [1.27] X No. of Positions
B = .050 [1.27] X No. of Spaces

Recommended PCB Layout



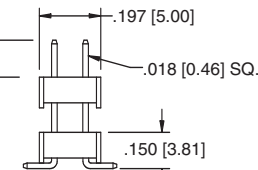
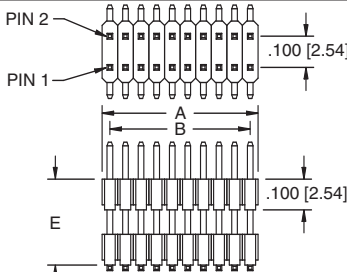
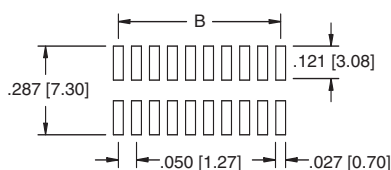
DHPH-1 (SMT)



DHPH-1-10-U-.079/SMT-A/.354

A = .050 [1.27] X No. of Positions per row
B = .050 [1.27] X No. of Spaces

Recommended PCB Layout

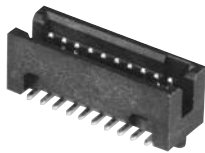


DHPH-2 (SMT)



DHPH-2-40-U-.079/SMT/.354

MALE HEADER



ORDERING INFORMATION



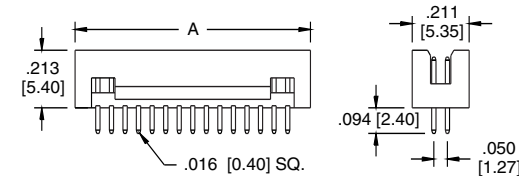
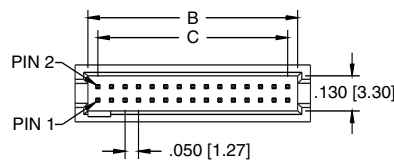
SERIES INDICATOR
HSH = .050"
Shrouded header

TOTAL POSITIONS
10 thru 100

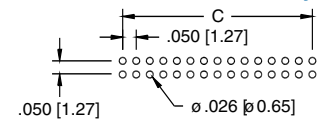
PLATING
G = Gold plated
T = Tin plated
SG = Gold plating in contact area, tin plated solder tails

OPTIONS:

SMT = Surface mount leads with Hi-Temp insulator
P = Peg option (thru hole only)



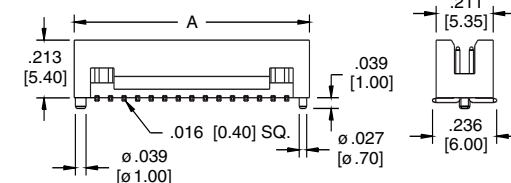
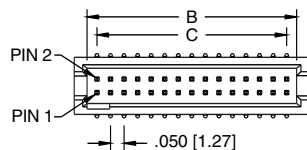
Recommended PCB Layout



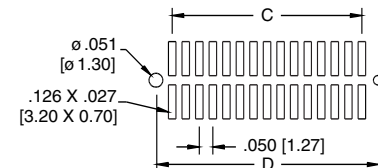
Standard: With key & without peg

A = .050 X No. of Spaces + .168 [4.27]
B = .050 X No. of Spaces + .074 [1.87]
C = .050 X No. of Spaces

HSH SERIES
SHROUDED MALE HEADER



Recommended PCB Layout

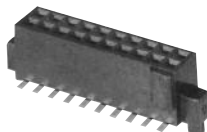


Standard: With key & with peg

A = .050 X No. of Spaces + .168 [4.27]
B = .050 X No. of Spaces + .074 [1.87]
C = .050 X No. of Spaces
D = .050 X No. of Spaces + .120 [3.05]

HSH-SMT SERIES
SHROUDED MALE HEADER

FEMALE HEADER



ORDERING INFORMATION



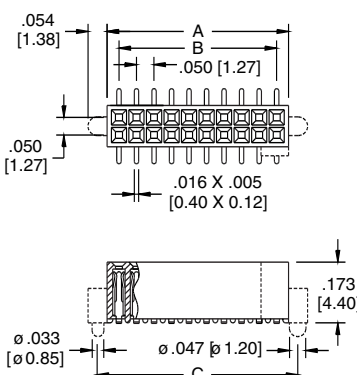
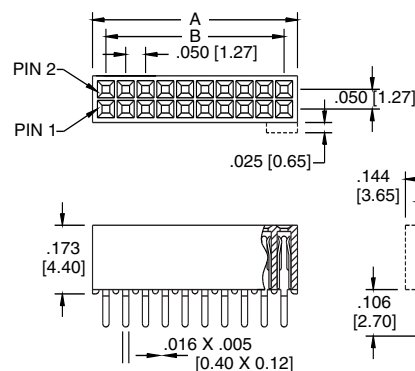
SERIES INDICATOR
HFH = .050"
Female header

TOTAL POSITIONS
10 thru 100

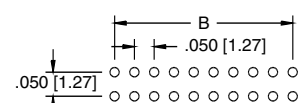
PLATING
G = Gold plated
T = Tin plated
SG = Gold plating in contact area, tin plated solder tails

OPTIONS:

SMT = Surface mount leads with Hi-Temp insulator
NP = No peg
NK = No Key
P = Peg option (thru hole only)



Recommended PCB Layout

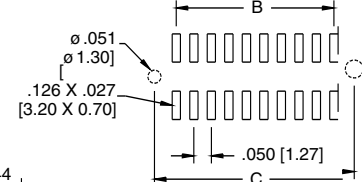


Standard: With key & without peg

A = .050 X No. of Spaces + .068 [1.73]
B = .050 X No. of Spaces
C = .050 X No. of Spaces + .120 [3.05]

HFH SERIES
SHROUDED FEMALE HEADER

Recommended PCB Layout



Standard: With key & with peg

A = .050 X No. of Spaces + .068 [1.73]
B = .050 X No. of Spaces
C = .050 X No. of Spaces + .120 [3.05]

HFH-SMT SERIES
SHROUDED FEMALE HEADER

INTRODUCTION

Adam Tech 2PH & D2PH Series 2.0mm Pin Headers offer a full range of fine pitched headers in a variety of configurations including Single, Dual and Three rows, Straight & Right Angle in Thru-Hole or SMT mounting. Their close tolerance .020" sq. posts are smoothly finished and taper tipped to eliminate insertion damage to the PCB or mating connector. Adam Tech 2.0mm 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 2.0mm pitch mating connectors.

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 .050" pitch female headers

SPECIFICATIONS:

Material:

Standard 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 overall
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: 1 Amp max.
Contact resistance: 20 mΩ max. initial
Insulation resistance: 5000 MΩ min.
Dielectric withstanding voltage: 1000V AC for 1 minute

Mechanical:

Mating durability: 1,000 cycles

Temperature Rating:

Operating temperature: -55°C to +105°C
Soldering process temperature: 260°C

PACKAGING:

Anti-ESD plastic bags
(Tape and Reel available for SMT option)

APPROVALS AND CERTIFICATIONS:

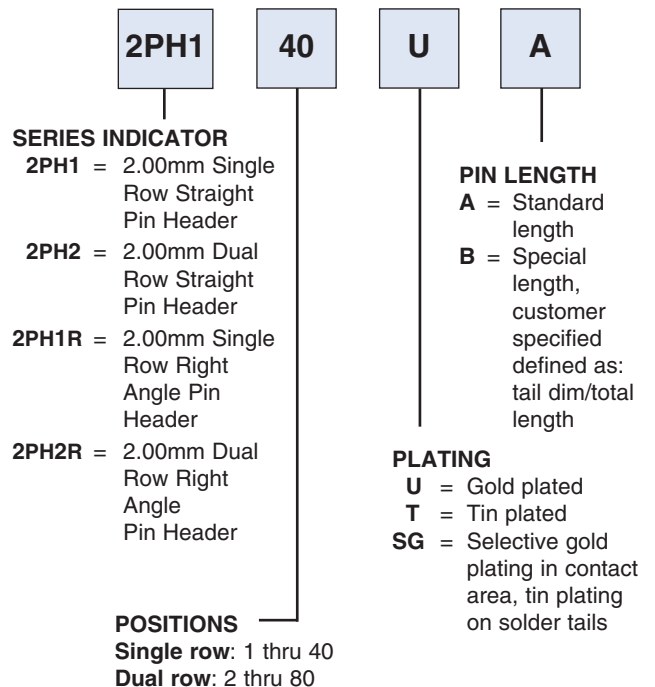
UL Recognized File No. E224053
CSA Certified File No. LR1578596



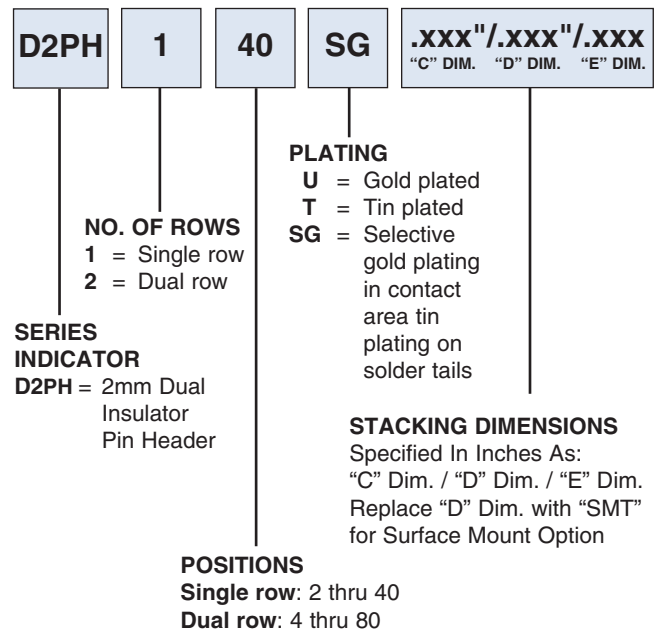
OPTIONS: Add designator(s) to end of part number

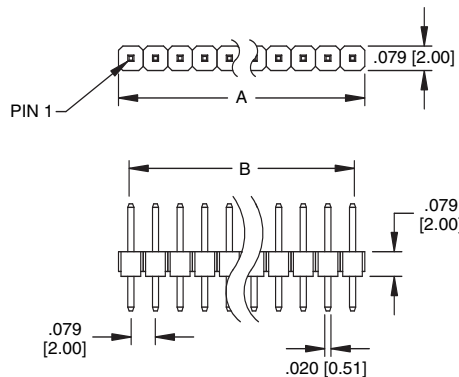
- SMT** = Surface Mount leads Dual Row
SMT-A = Surface Mount leads Type A
SMT-B = Surface Mount Leads Type B
HT = Hi-Temp insulator for Hi-Temp soldering processes up to 260°C
(Add this option for thru-hole products only. All SMT products are manufactured with Hi-Temp insulators)
L = Low profile 1.5mm insulator thickness
P = Locating pegs
BR = Board retention sold

ORDERING INFORMATION



ORDERING INFORMATION DUAL INSULATOR HEADERS

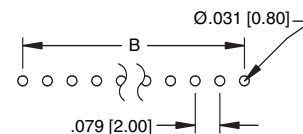




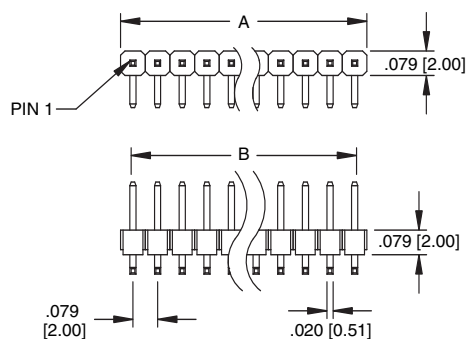
2PH1



A = .079" [2.00] x No. of positions
B = .079" [2.00] x No. of spaces



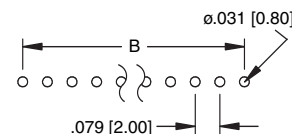
Recommended PCB Layout



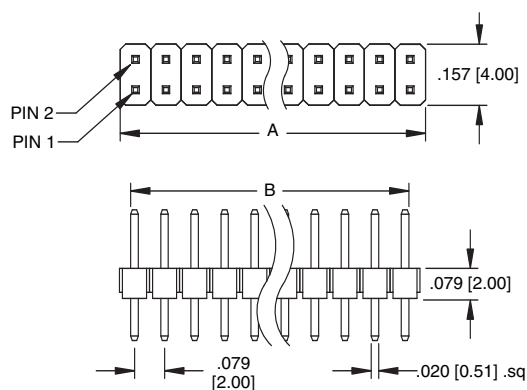
2PH1R



A = .079" [2.00] x No. of positions
B = .079" [2.00] x No. of spaces



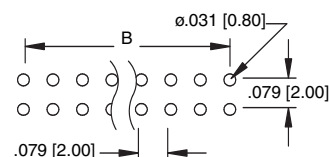
Recommended PCB Layout



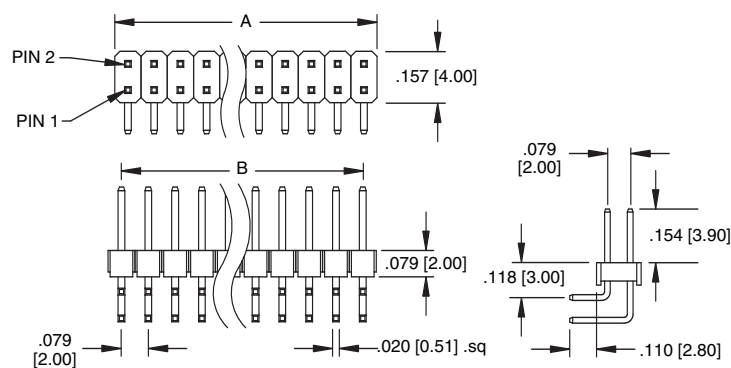
2PH2



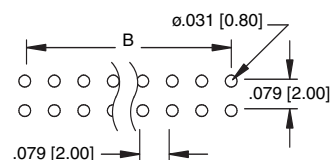
A = .079" [2.00] x No. of positions
B = .079" [2.00] x No. of spaces



Recommended PCB Layout



2PH2R

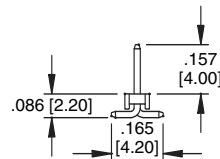
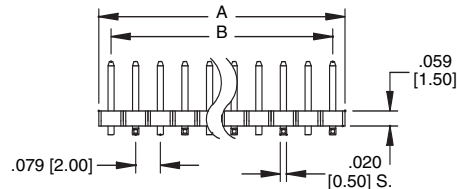
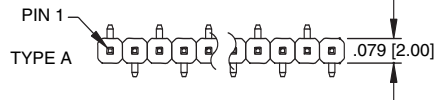


Recommended PCB Layout

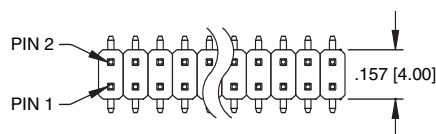
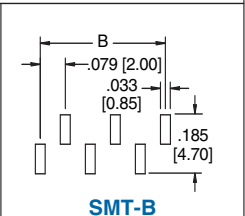
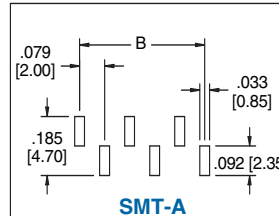


A = .079" [2.00] x No. of positions
B = .079" [2.00] x No. of spaces

2PH1 (SMT)

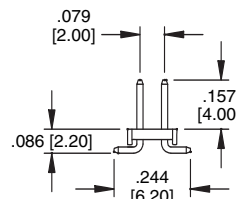
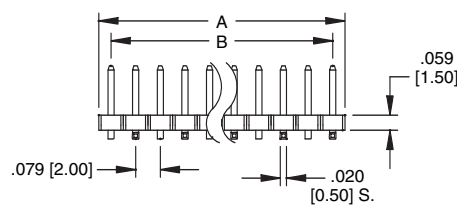


Recommended PCB Layout

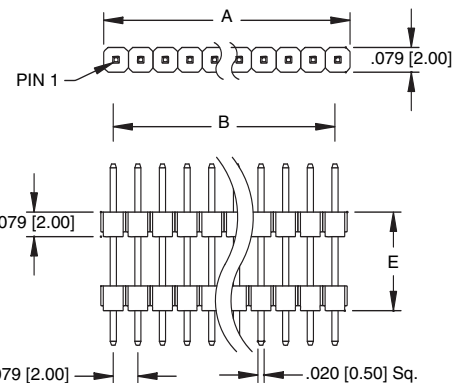
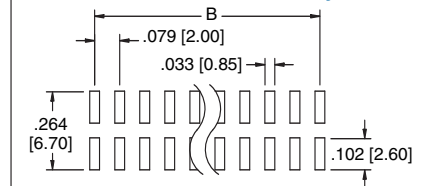


A = .079" [2.00] x No. of positions
B = .079" [2.00] x No. of spaces

2PH2 (SMT)

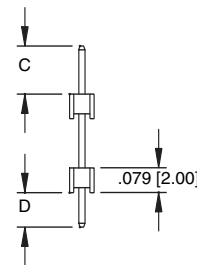


Recommended PCB Layout

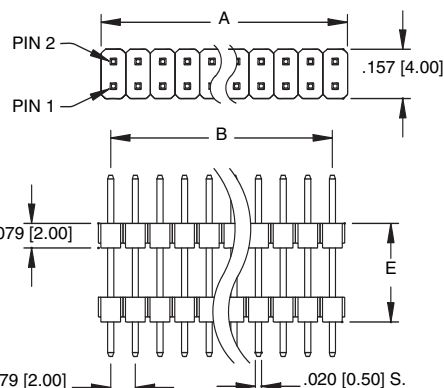
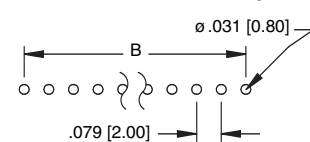


A = .079" [2.00] x No. of positions
B = .079" [2.00] x No. of spaces

D2PH-1

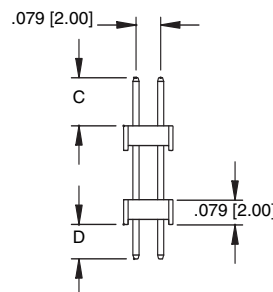


Recommended PCB Layout

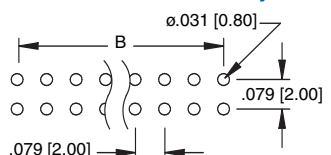


A = .079 [2.00] x No. of positions
B = .079 [2.00] x No. of spaces

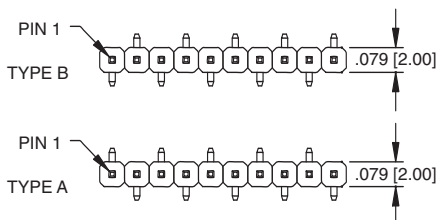
D2PH-2



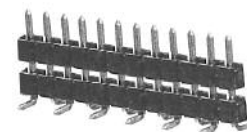
Recommended PCB Layout



D2PH-1 (SMT)

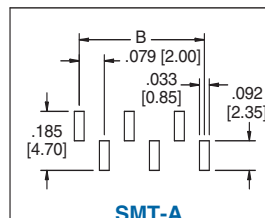
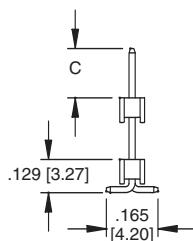
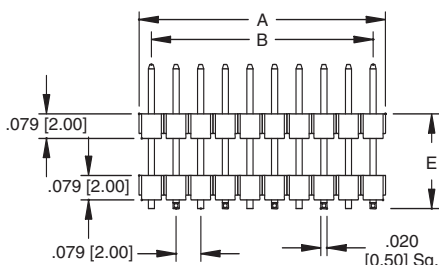


A = .079" [2.00] x No. of positions
B = .079" [2.00] x No. of spaces

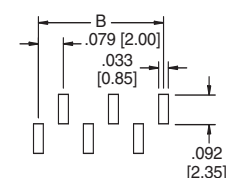


D2PH-1-12-U-100/SMT/240

Recommended PCB Layout

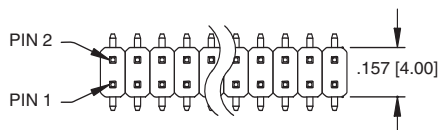


SMT-A

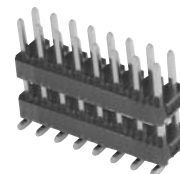


SMT-B

D2PH-2 (SMT)

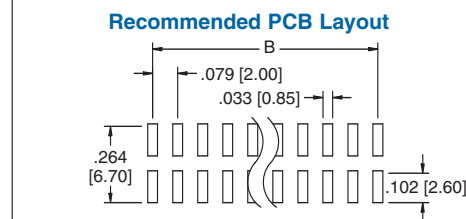
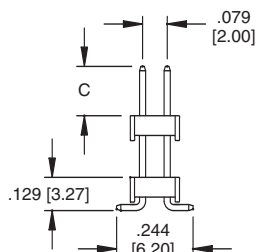
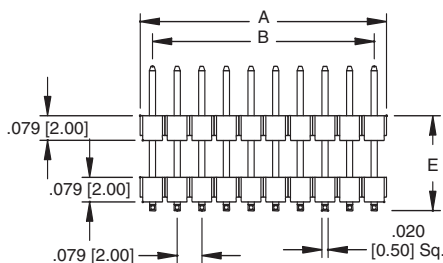


A = .079" [2.00] x No. of positions
B = .079" [2.00] x No. of spaces

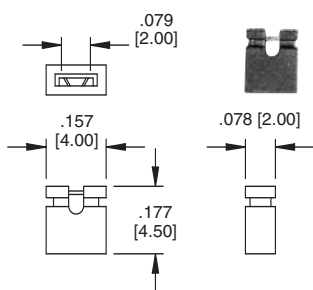


D2PH-2-16-U-145/SMT/360

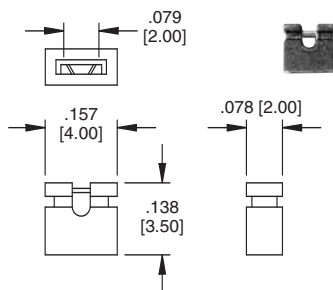
Recommended PCB Layout



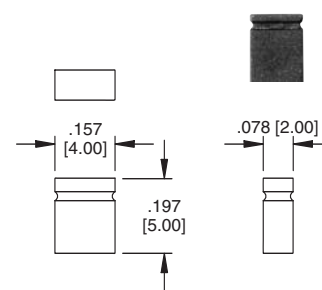
MS2A



MS2B

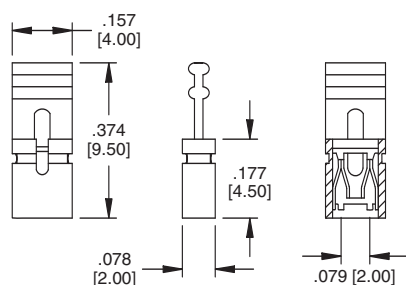


MS2C



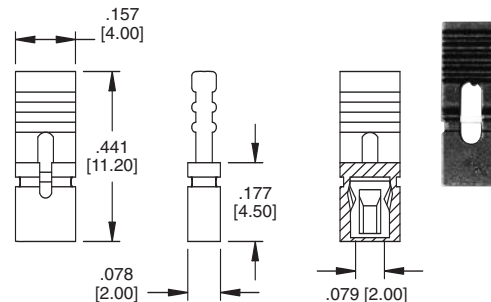
MS2H-1

WITH RIGID SHORT HANDLE



MS2H-2

WITH FLEXIBLE LONG HANDLE



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:

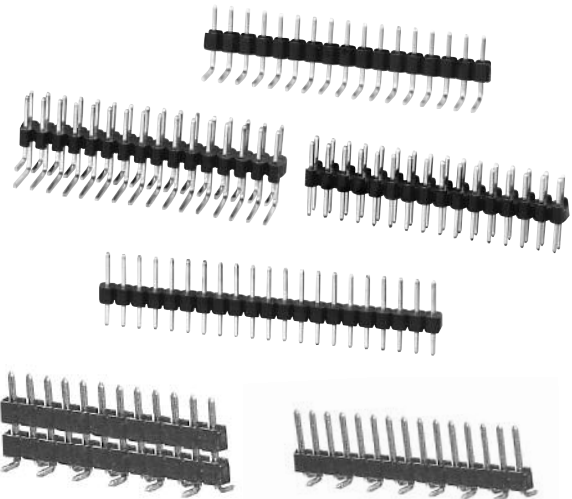
Operating temperature: -55°C to +105°C
Soldering process temperature:
Standard insulator: 235°C
Hi-Temp insulator: 260°C

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

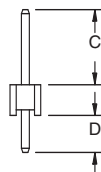
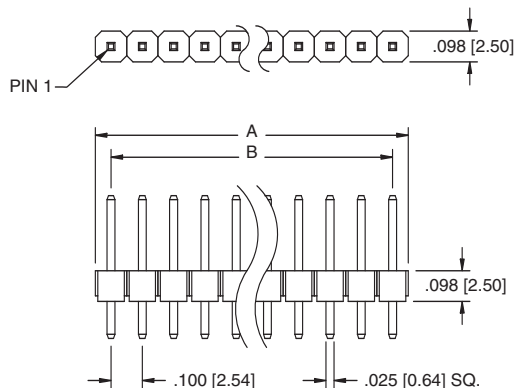
SMT-A = Surface mount leads Type A with Hi-Temp insulator

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.

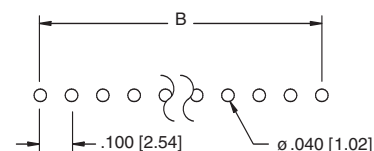


PH1
SINGLE ROW

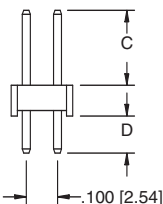
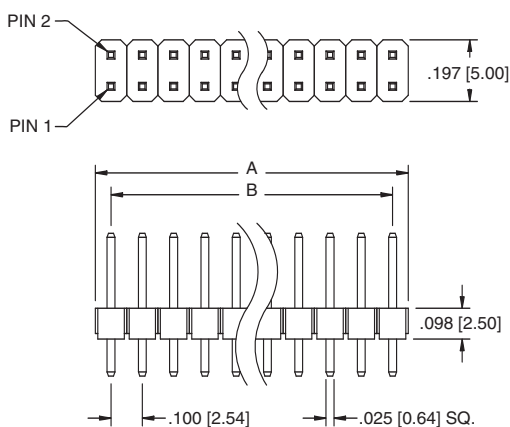


PH1-16-UA

Recommended PCB Layout



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

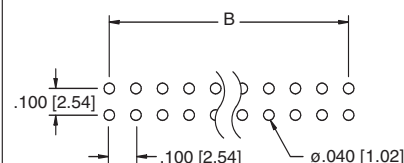


PH2
DUAL ROW

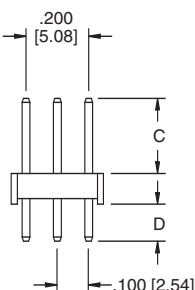
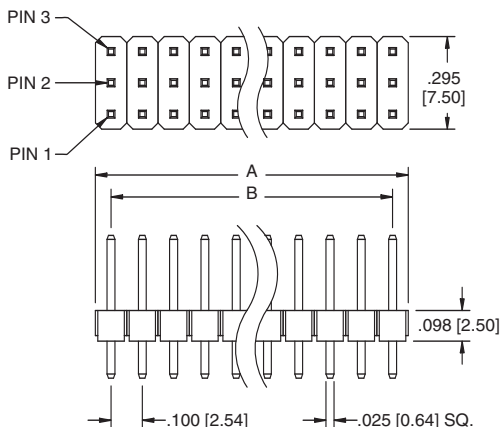


PH2-32-UA

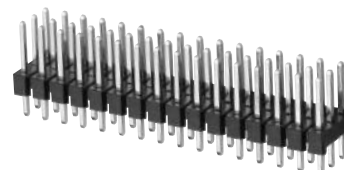
Recommended PCB Layout



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

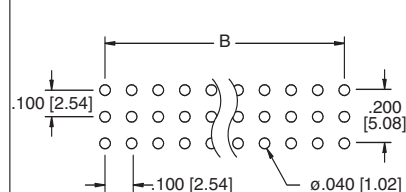


PH3
TRIPLE ROW

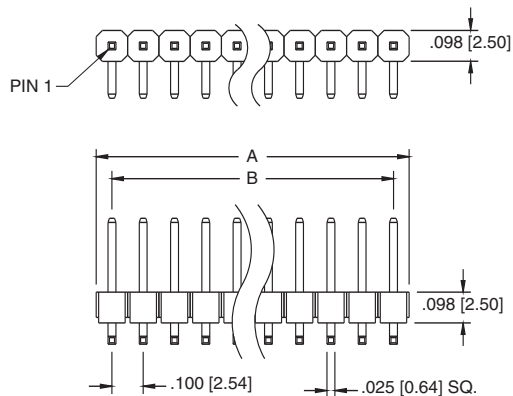


PH3-48-UA

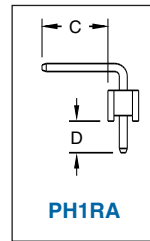
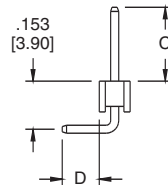
Recommended PCB Layout



PH1RB SINGLE ROW

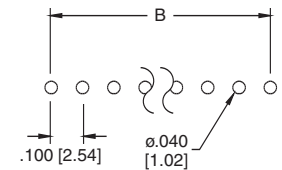


A = .100 [2.54] X No. of Positions.
B = .100 [2.54] X No. of Spaces.



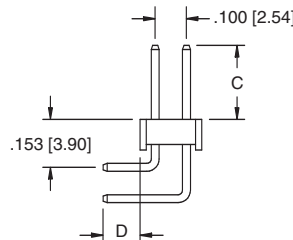
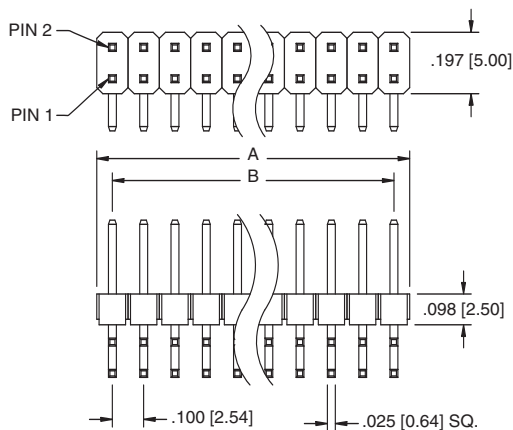
PH1RB-16-UA

Recommended PCB Layout



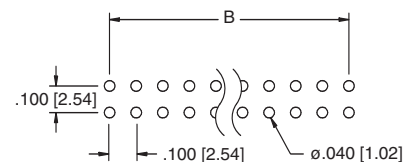
A = .100 [2.54] X No. of Positions per row.
B = .100 [2.54] X No. of Spaces.

PH2RA DUAL ROW



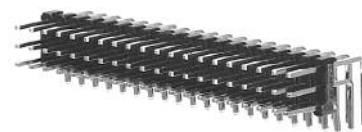
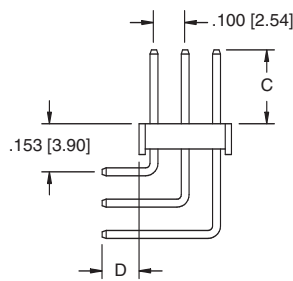
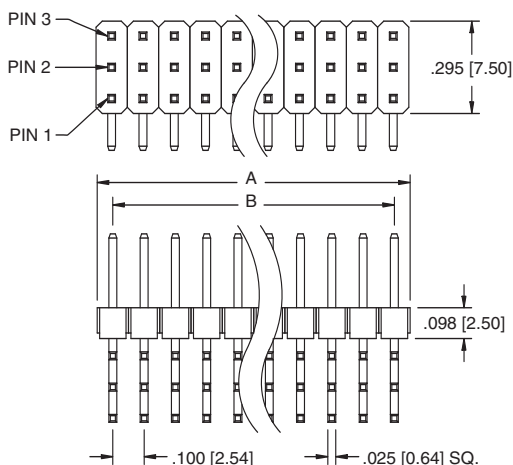
PH2RA-32-UA

Recommended PCB Layout



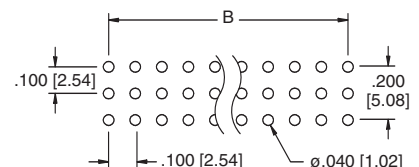
A = .100 [2.54] X No. of Positions per row.
B = .100 [2.54] X No. of Spaces.

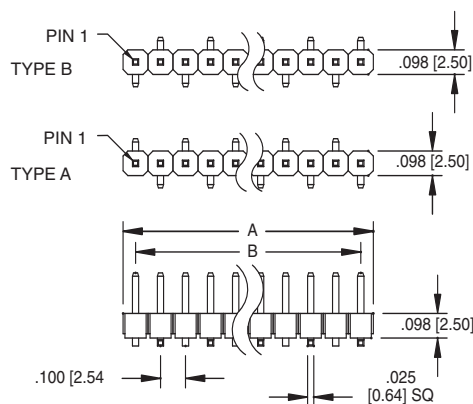
PH3RA TRIPLE ROW



PH3RA-48-UA

Recommended PCB Layout





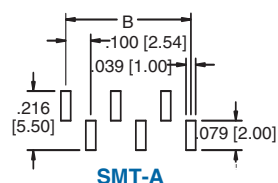
A = .100 [2.54] X No. of Positions.
B = .100 [2.54] X No. of Spaces.



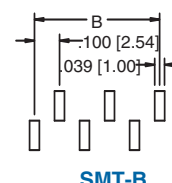
PH1-15-UA-SMT-B

PH1
SMT-SINGLE ROW

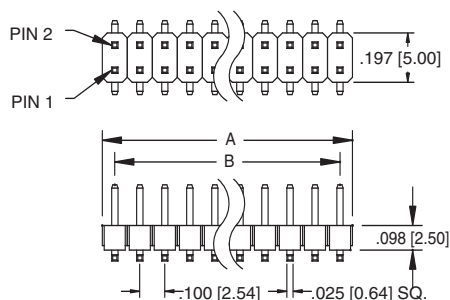
Recommended PCB Layout



SMT-A



SMT-B



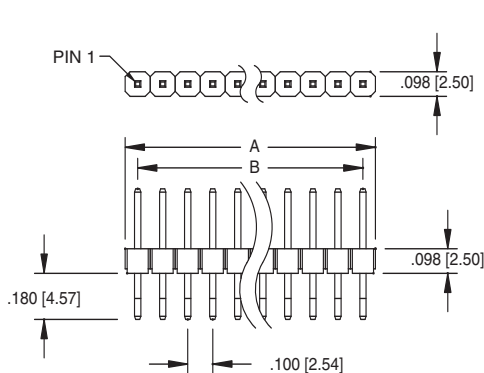
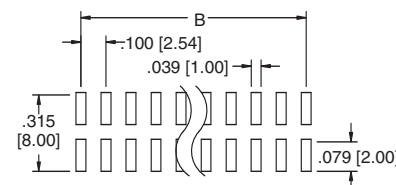
A = .100 [2.54] X No. of Positions per row.
B = .100 [2.54] X No. of Spaces.



PH2-26-UA-SMT

PH2
SMT-DUAL ROW

Recommended PCB Layout



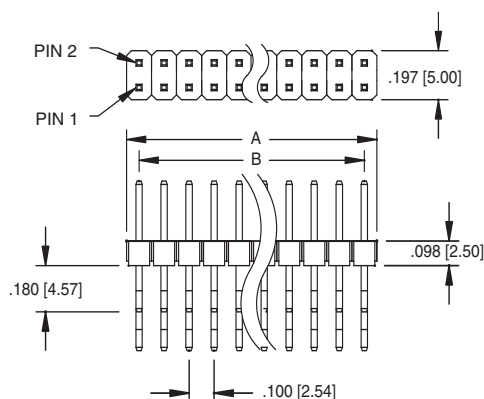
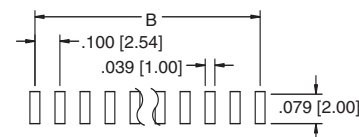
A = .100 [2.54] X No. of Positions.
B = .100 [2.54] X No. of Spaces.



PH1RB-10-UA-SMT

PH1RB
SMT-SINGLE ROW

Recommended PCB Layout



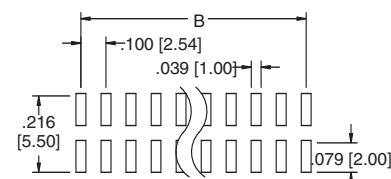
A = .100 [2.54] X No. of Positions per row.
B = .100 [2.54] X No. of Spaces.



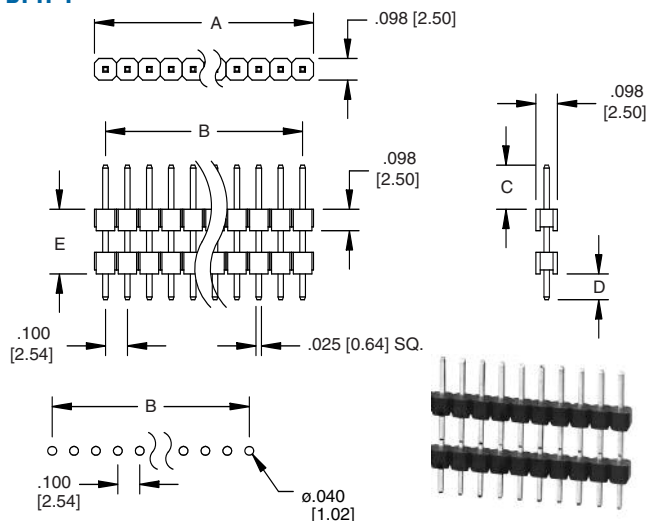
PH2RA-20-UA-SMT

PH2RA
SMT-DUAL ROW

Recommended PCB Layout



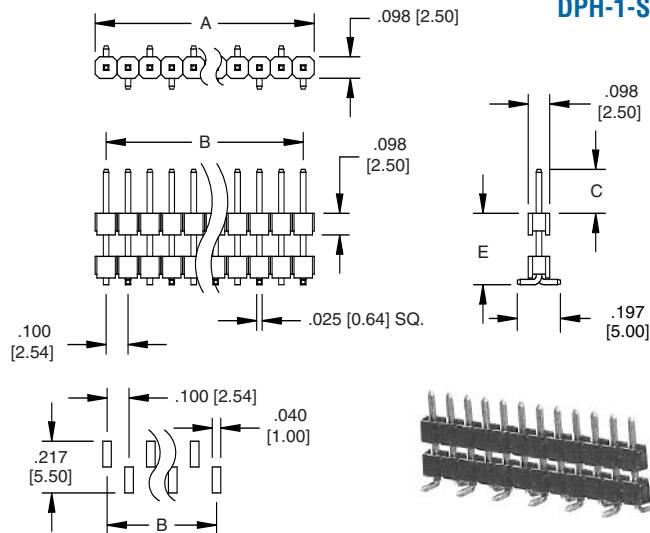
DPH-1



Recommended PCB Layout

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

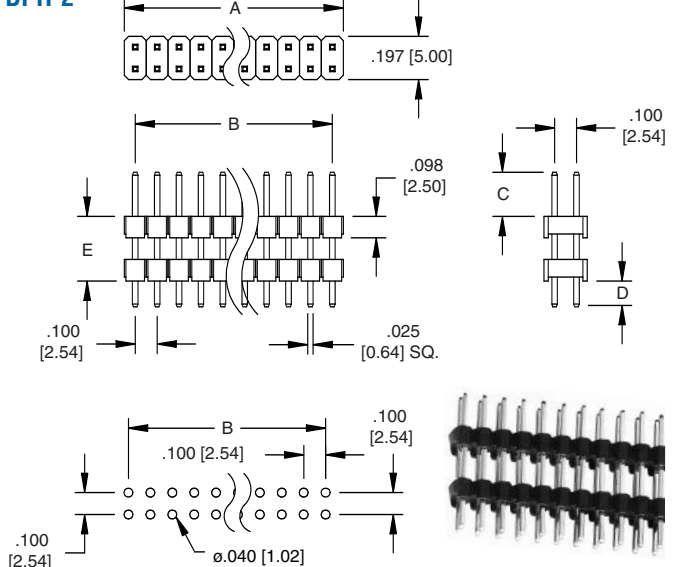
DPH-1-SMT



Recommended PCB Layout

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

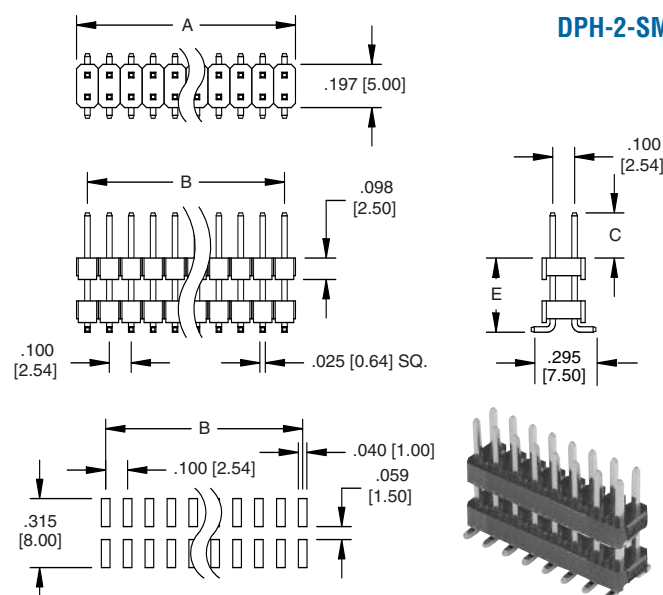
DPH-2



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)