

INTRODUCTION:

Adam Tech RS Series .100" Receptacle Strips are a series of sockets offered in a multitude of sizes and profiles designed to satisfy most .100" socket requirements. Available in Single, Dual and Three rows, they are offered in Straight, Right Angle, SMT, Bottom Entry and Pass Through PCB mounting styles. Each type has a specially designed contact system which uses a wiping mating action and produces a high normal force connection with gold, tin or selective gold plating. All are available with Standard or Hi-Temp Thermoplastic insulators. Our SMT offering is available with optional pick and place pads and tape & reel packaging.

FEATURES:

- Broad range of sizes and profiles
- Contact systems with high normal force
- Choice of contact plating
- SMT pick & place option
- Optional Tape & reel packaging

MATING CONNECTORS:

Adam Tech PH series .100" pitch pin headers and all industry standard pin headers with a .025" (0.64mm) square pin.

SPECIFICATIONS:

Material:

Insulator: PBT, glass reinforced, rated UL94V-0
Nylon 6T, rated UL94V-0
Insulator Color: Black
Contacts: Phosphor Bronze

Contact Plating:

G = 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

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: 0.375 lbs per contact max.
Withdrawal force: 0.125 lbs per contact min.

Temperature Rating:

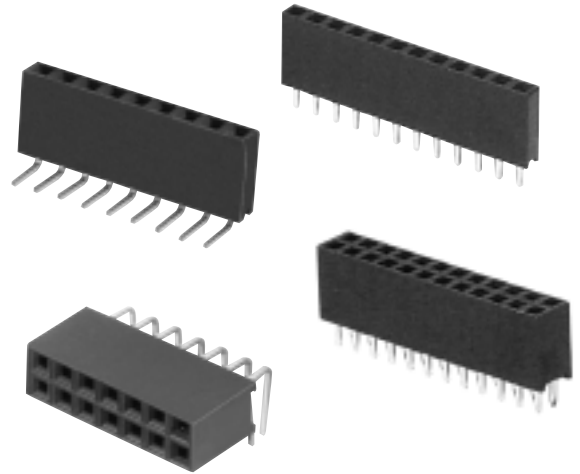
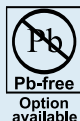
Operating temperature: -40°C to +105°C

PACKAGING:

Anti-ESD plastic trays
(Tape and Reel optional for SMT option)

SAFETY AGENCY APPROVALS:

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



ORDERING INFORMATION



SERIES INDICATOR

- RS1** = Single row vertical mount receptacle
- RS1R** = Single row right angle mount receptacle
- RS2** = Dual row vertical mount receptacle
- RS2R** = Dual row right angle mount receptacle
- RSB** = Dual row straight PCB mount with polarization bump and keyed corner contacts
- RSBR** = Dual row right angle PCB mount with polarization bump and keyed corner contacts

PLATING

- G** = Gold plated
- T** = Tin plated
- SG** = Gold plating in contact area, Tin-Lead Plated solder tails

POSITIONS

- Single row:** 1 thru 43
- Dual row:** 2 thru 80

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
- 30** = 30 μin gold plating in contact area
- RC** = RoHS compliant lead-free product with Hi-Temp insulator
- P** = Optional guide peg on SMT version

RECEPTACLE STRIPS FOUR SIDED CONTACT PAGE 253 & 257



SERIES INDICATOR

RS1B = Single row, vertical mount 4-sided contact receptacle strip
RS2B = Dual row, vertical mount 4-sided contact receptacle strip
RS1BR = Single row, right angle mount, 3-sided contact receptacle strip
RS2BR = Dual row, right angle mount, 3-sided contact receptacle strip

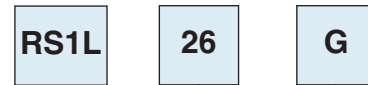
PLATING

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

POSITIONS

Single row: 1 thru 40
Dual row: 4 thru 80

RECEPTACLE STRIPS LOW PROFILE PAGE 256



SERIES INDICATOR

RS1L = Single row, .216" body height
RS2L = Dual row, .216" body height

PLATING

G = Gold plated
T = Tin plated

POSITIONS

Single row: 1 thru 36
Dual row: 4 thru 72

RECEPTACLE STRIPS BOTTOM, PASS THROUGH OR DUAL ENTRY PAGE 258



SERIES INDICATOR

RS1BE = Single row, vertical mount, bottom, pass through or dual entry receptacle strip
RS2BE = Dual row, vertical mount, bottom, pass through or dual entry receptacle strip

PLATING

G = Gold plated

SOLDER TAIL FOOTPRINT

A = .100" x .150"
B = .100" x .200"
C = .100" x .300"
Blank = Single row

POSITIONS

Single Row: 1 thru 40
Dual Row: 6 Thru 80

RECEPTACLE STRIPS VERY LOW PROFILE PAGE 251



SERIES INDICATOR

RSVL = Vertical Mount, very low profile receptacle strip

PLATING

G = Gold plated
T = Tin plated

PROFILE / NO. OF ROWS

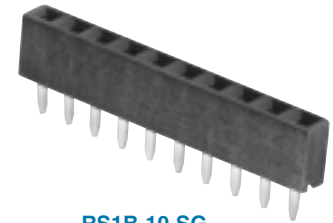
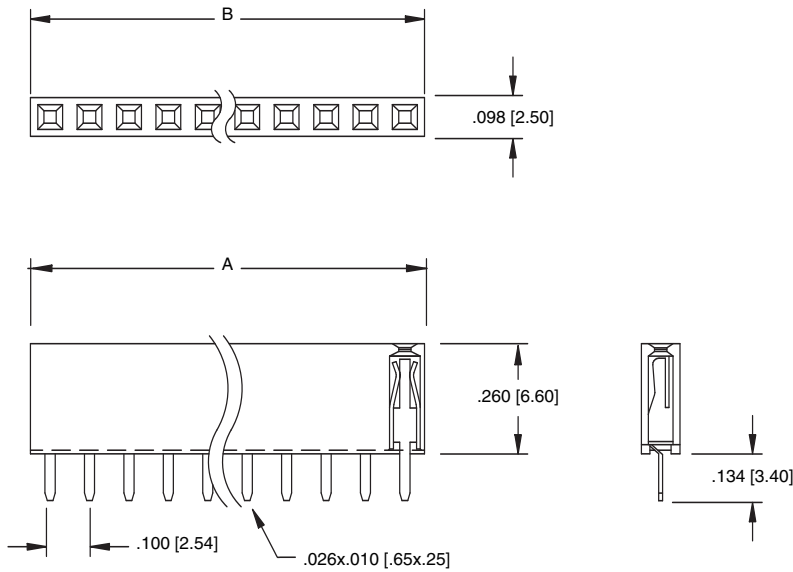
1A = Single row, .138" body height
1B = Single row, .210" body height
2A = Dual row, .138" body height
2B = Dual row, .210" body height

POSITIONS

Single Row: 1 Thru 36
Dual Row: 4 Thru 72

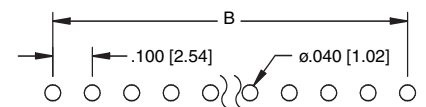
<p>RS2BE-A</p> <p>SINGLE ROW CONFIGURATION ALSO AVAILABLE</p> <p>A = .100 [2.54] X No. of Positions B = .100 [2.54] X No. of Spaces</p>	<p>RS2BE-A-28-G</p> <p>Recommended PCB Layout</p>
<p>RS2BE-B</p> <p>SINGLE ROW CONFIGURATION ALSO AVAILABLE</p> <p>A = .100 [2.54] X No. of Positions B = .100 [2.54] X No. of Spaces</p>	<p>RS2BE-B-26-G</p> <p>Recommended PCB Layout</p>
<p>RS2BE-C</p> <p>SINGLE ROW CONFIGURATION ALSO AVAILABLE</p> <p>A = .100 [2.54] X No. of Positions B = .100 [2.54] X No. of Spaces</p>	<p>RS2BE-C-30-G</p> <p>Recommended PCB Layout</p>

RS1B



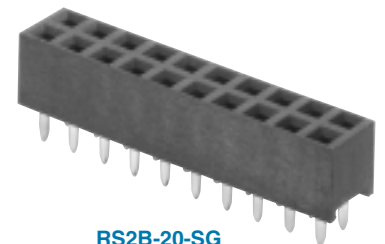
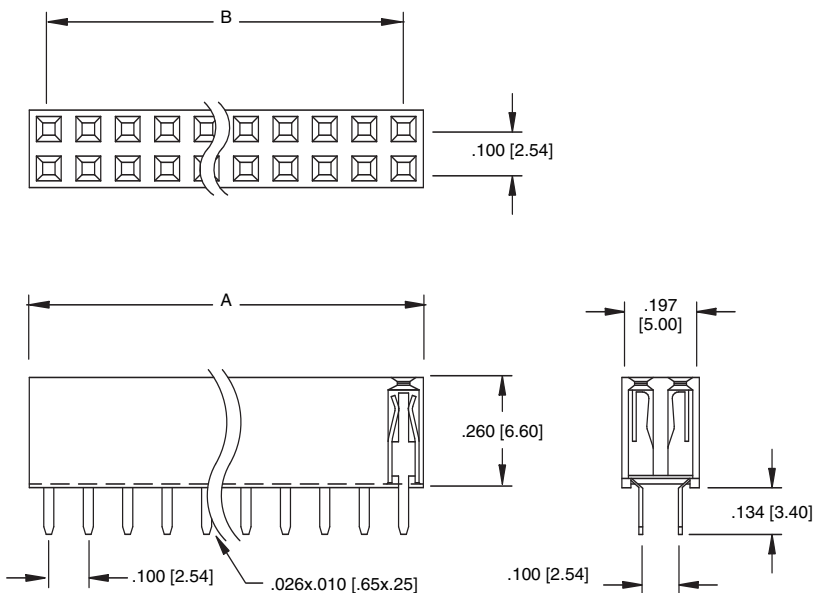
RS1B-10-SG

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



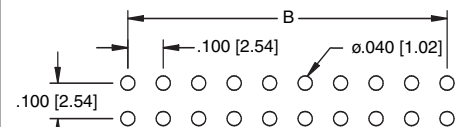
Recommended PCB Layout

RS2B



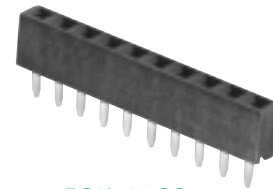
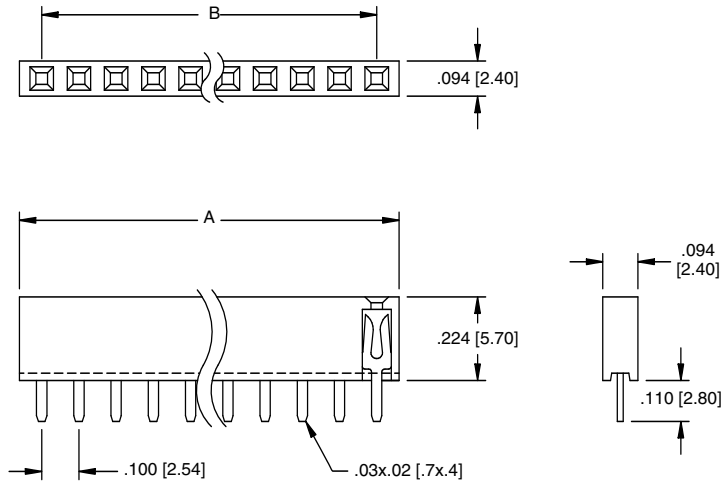
RS2B-20-SG

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



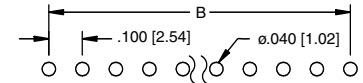
Recommended PCB Layout

RS1L



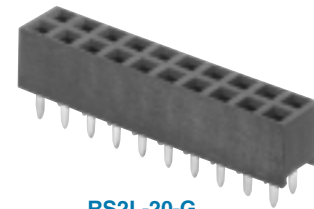
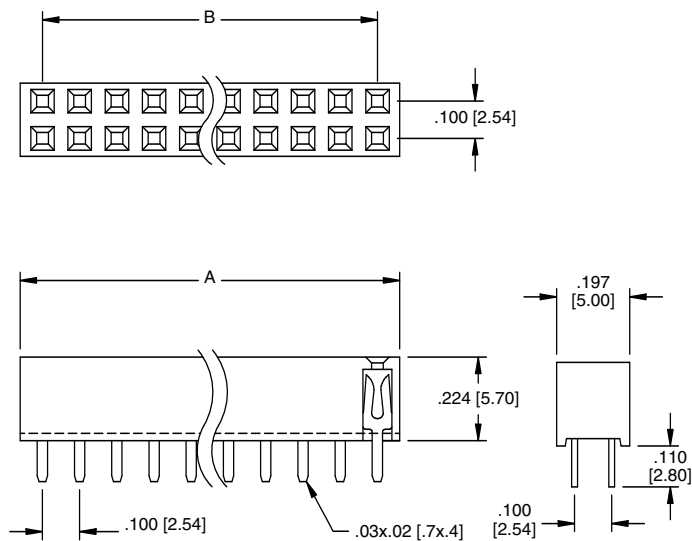
RS1L-10-SG

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



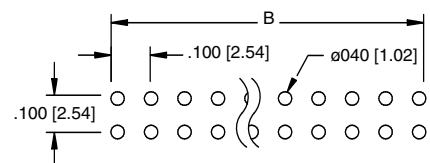
Recommended PCB Layout

RS2L



RS2L-20-G

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



Recommended PCB Layout

Top view dimensions: B , $.100$ [2.54], $.146$ [3.70], PLUG X4 PLACES, $.100$ [2.54]

Side view dimensions: A , $.335$ [8.50], $.024 \times .016$ [0.60x0.40]

Detail view dimensions: $.279$ [7.10], $.236$ [6.00], $.126$ [3.20], $.100$ [2.54]

Formulas:
 $A = .100$ [2.54] X No. of Positions + $.003$ [0.08]
 $B = .100$ [2.54] X No. of Spaces

RSB

RSB-20-G

Recommended PCB Layout

Dimensions: B , $.100$ [2.54], $.100$ [2.54], $\phi .040$ [1.02]

Top view dimensions: B , $.100$ [2.54], $.146$ [3.70], PLUG X4 PLACES, $.100$ [2.54]

Side view dimensions: A , $.335$ [8.50], $.024 \times .016$ [0.60x0.40]

Detail view dimensions: $.279$ [7.10], $.236$ [6.00], $.126$ [3.20], $.063$ [1.60], $.220$ [5.60], $.100$ [2.54]

Formulas:
 $A = .100$ [2.54] X No. of Positions + $.003$ [0.08]
 $B = .100$ [2.54] X No. of Spaces

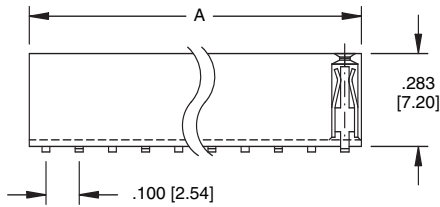
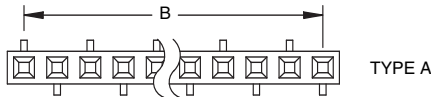
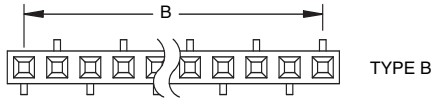
RSBR

RSBR-20-G

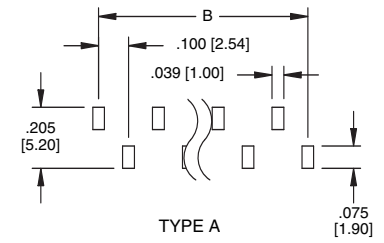
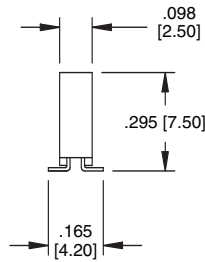
Recommended PCB Layout

Dimensions: B , $.100$ [2.54], $.100$ [2.54], $\phi .040$ [1.02]

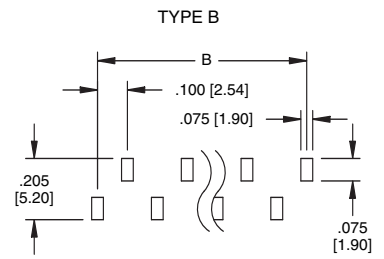
RS1-SMT



RS1-10-SG-SMT-A



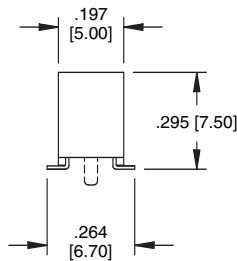
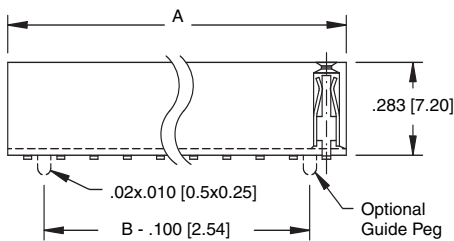
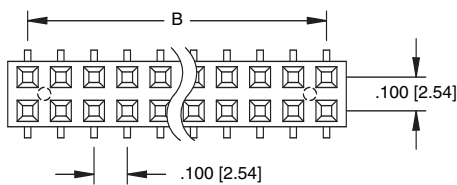
Recommended PCB Layout



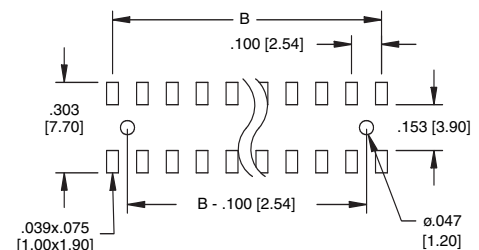
Recommended PCB Layout

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

RS2-SMT



RS2-20-SG-SMT



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

RS2

RS2-24-G

Recommended PCB Layout

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

RS2R

RS2R-14-G

Recommended PCB Layout

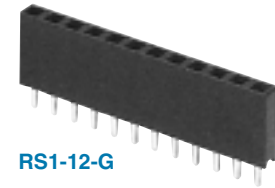
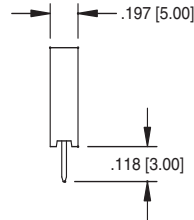
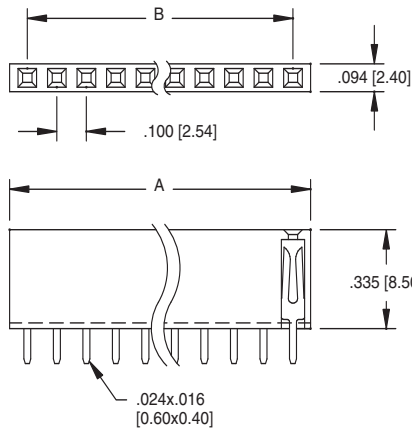
A = .100 [2.54] X No. of Positions
B = .100 [2.54] X No. of Spaces

RS2BR

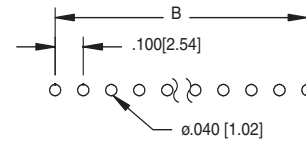
RS2BR-28-G

Recommended PCB Layout

RS1



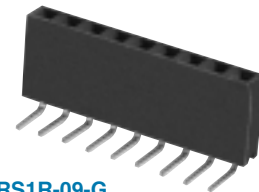
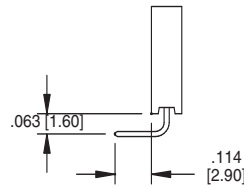
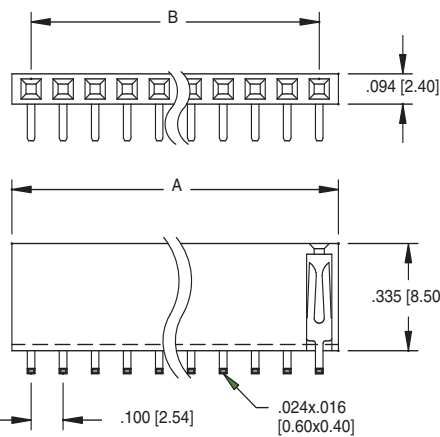
RS1-12-G



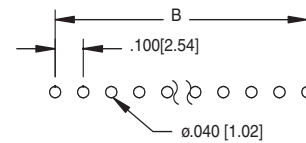
Recommended PCB Layout

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

RS1R



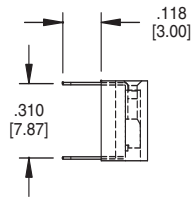
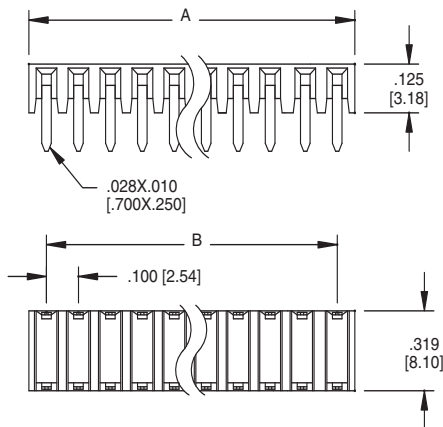
RS1R-09-G



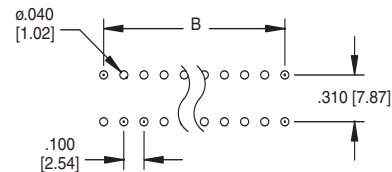
Recommended PCB Layout

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

RS1BR



RS1BR-15-G

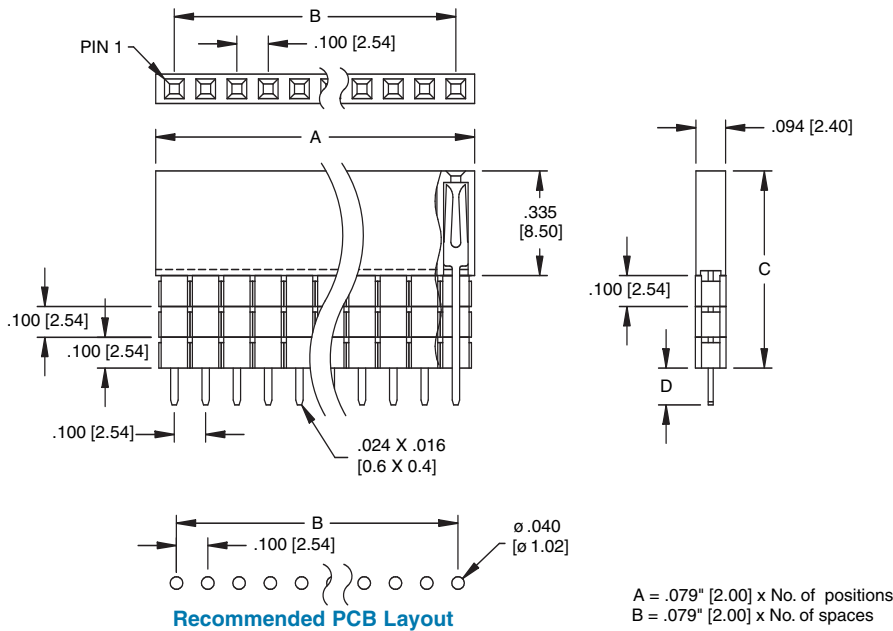


Recommended PCB Layout

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

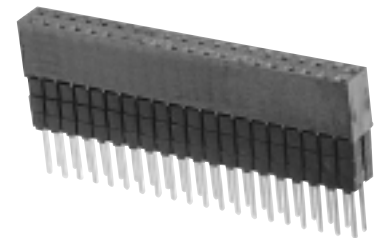
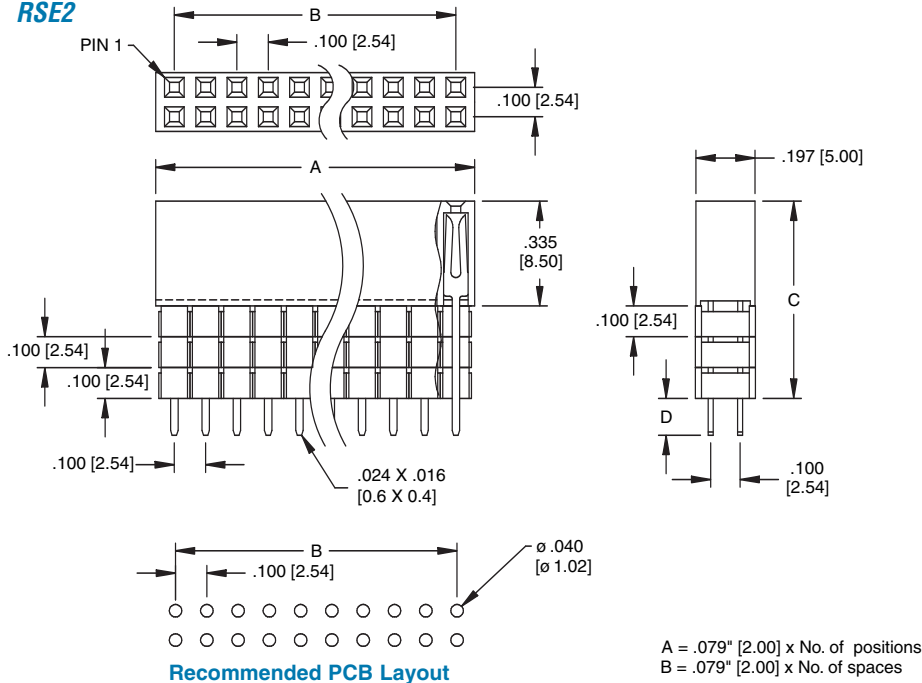
<p>A = .100 [2.54] X No. of Positions B = .100 [2.54] X No. of Spaces</p>	<p>RSVL-1A</p> <p>RSVL-1A-18-G</p> <p>Recommended PCB Layout</p>
<p>A = .100 [2.54] X No. of Positions Per Row B = .100 [2.54] X No. of Spaces</p>	<p>RSVL-2A</p> <p>RSVL-2A-38-G</p> <p>Recommended PCB Layout</p>
<p>A = .100 [2.54] X No. of Positions B = .100 [2.54] X No. of Spaces</p>	<p>RSVL-1B</p> <p>RSVL-1B-18-G</p> <p>Recommended PCB Layout</p>
<p>A = .100 [2.54] X No. of Positions Per Row B = .100 [2.54] X No. of Spaces</p>	<p>RSVL-2B</p> <p>RSVL-2B-36-G</p> <p>Recommended PCB Layout</p>

RSE1



RSE1-3-20-SG-3

RSE2



RSE2-3-40-SG-3

PART NUMBER	INSULATORS	DIM. C	DIM. D
RSE*-1-XX-SG-1	1	.435 [11.04]	.090 [2.30]
RSE*-1-XX-SG-2	1	.435 [11.04]	.114 [2.90]
RSE*-1-XX-SG-3	1	.435 [11.04]	.290 [7.38]
RSE*-2-XX-SG-1	2	.535 [13.58]	.190 [4.84]
RSE*-2-XX-SG-2	2	.535 [13.58]	.380 [9.65]
RSE*-3-XX-SG-1	3	.635 [16.12]	.090 [2.30]
RSE*-3-XX-SG-2	3	.635 [16.12]	.138 [3.50]
RSE*-3-XX-SG-3	3	.635 [16.12]	.280 [7.10]

