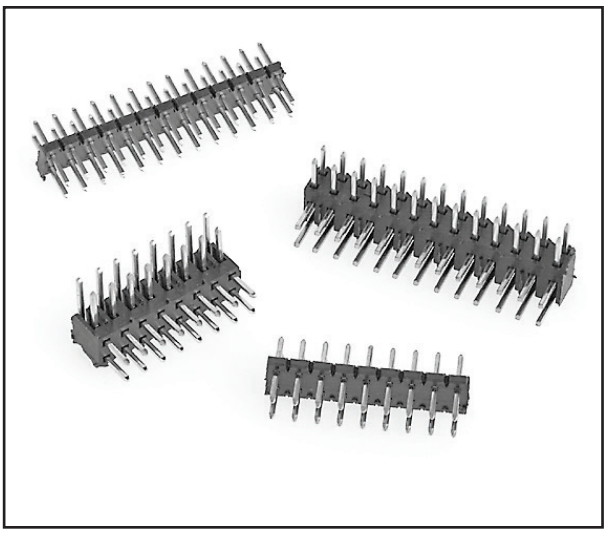
3M™ Pin Strip Header

2 mm × 2 mm Solder Tail Straight & Right Angle, Surface Mount Straight 1512 Series



- Mates with a variety of dual row 2 mm board mount and wire mount sockets
- High temperature insulator compatible with lead-free solder processes
- Extensive pin count availability from 4 to 80 positions
- Available with vacuum cap in tape and reel packaging for automatic placement
- Minimizes use of PC board space
- End and side stackable design
- RoHS Compliant. See the Regulatory Information Appendix (RIA) in the "RoHS Compliance" section of www.3Mconnectors.com for compliance information (RIA E1 & C1 apply)

Date Modified: January 14, 2013

Physical

Insulation:	
Material:	Glass-filled LCP
Flammability:	UL 94V-0
Color:	Black
Contact:	
Material:	Copper Alloy
Plating:	
Underplating:	50 µ" [1.27 µm] Nickel
Wiping Area:	30 µ" [0.76 µm] Gold Avg.
Solder Tails:	200-300 µ" [5.08-7.62 µm] Matte Tin
Marking:	None

Electrical

Current Rating:	3.50 A, 1 Line Powered 1.75 A, 6 Adjacent Lines Powered 1.00 A, All Lines Powered Rating Conditions: EIA-364-070 Method 2, 30°C maximum temperature rise, 20% derated. Reference appropriate 3M Product Specification for detailed current derating curves.
Insulation Resistance:	$> 1 \times 10^9\ \Omega$ at 250 V_{DC}
Withstanding Voltage:	500 V_{RMS} at Sea Level

Environmental

Temperature Rating:	-55°C to +105°C
Process Rating:	Maximum 260°C (per J-STD-020C)
Moisture Sensitivity Level:	1 (per J-STD-020C)

UL File No.: E68080

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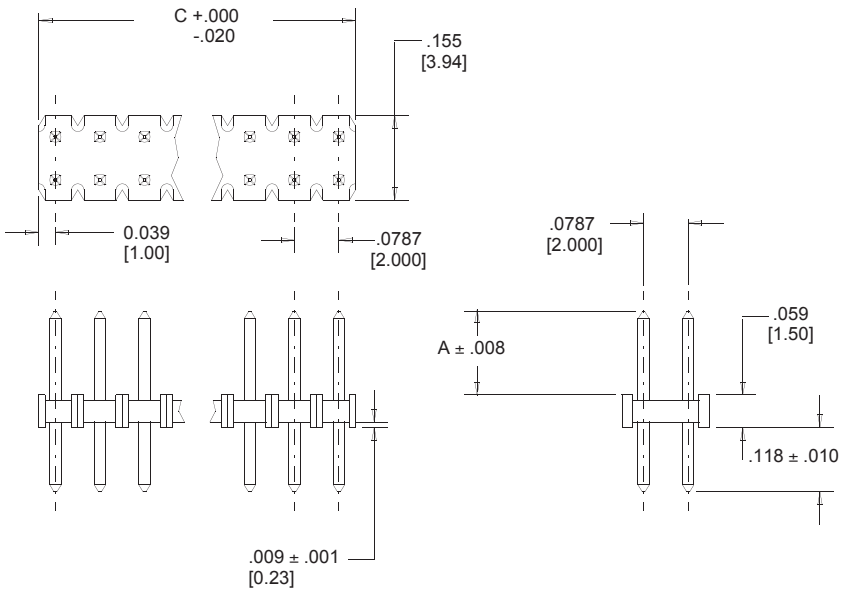
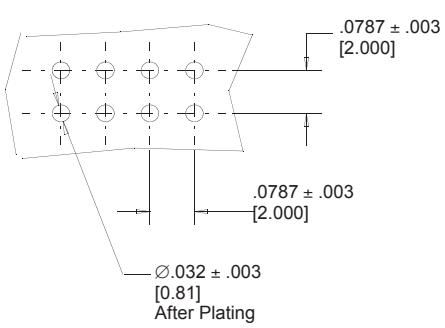
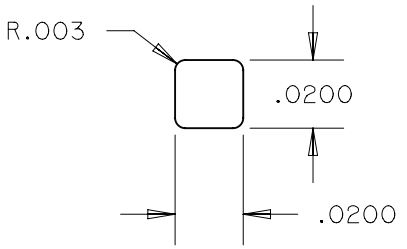
Straight





Recommended Mounting Hole Pattern



Pin Cross Section

Contact Quantity	Dimension C
04	0.157 [4.0]
06	0.236 [6.0]
08	0.315 [8.0]
10	0.394 [10.0]
12	0.472 [12.0]
14	0.551 [14.0]
16	0.63 [16.0]
18	0.709 [18.0]
20	0.787 [20.0]
22	0.866 [22.0]
24	0.945 [24.0]
26	1.024 [26.0]
28	1.102 [28.0]
30	1.181 [30.0]
32	1.26 [32.0]
34	1.339 [34.0]
36	1.417 [36.0]
38	1.496 [38.0]
40	1.575 [40.0]
42	1.654 [42.0]
44	1.732 [44.0]
46	1.811 [46.0]
48	1.89 [48.0]
50	1.969 [50.0]
52	2.047 [52.0]
54	2.126 [54.0]
56	2.205 [56.0]
58	2.283 [58.0]
60	2.362 [60.0]
80	3.15 [80.0]

mm
[Inch]

Tolerance Unless Noted		
	in.	mm
0.X	-	±0.5
0.XX	±0.01	±0.25
0.XXX	±0.005	±0.13

[ ] Dimensions for Reference Only

Ordering Information

1512XX-8X22-RB (RIA E1 & C1 Apply)

- Contact Quantity (See Table 1)
- Pin Length Dim 'A' 3 = .130" 4 = .152"

3M
Electronic Solutions Division
Interconnect Solutions
http://www.3Mconnectors.com

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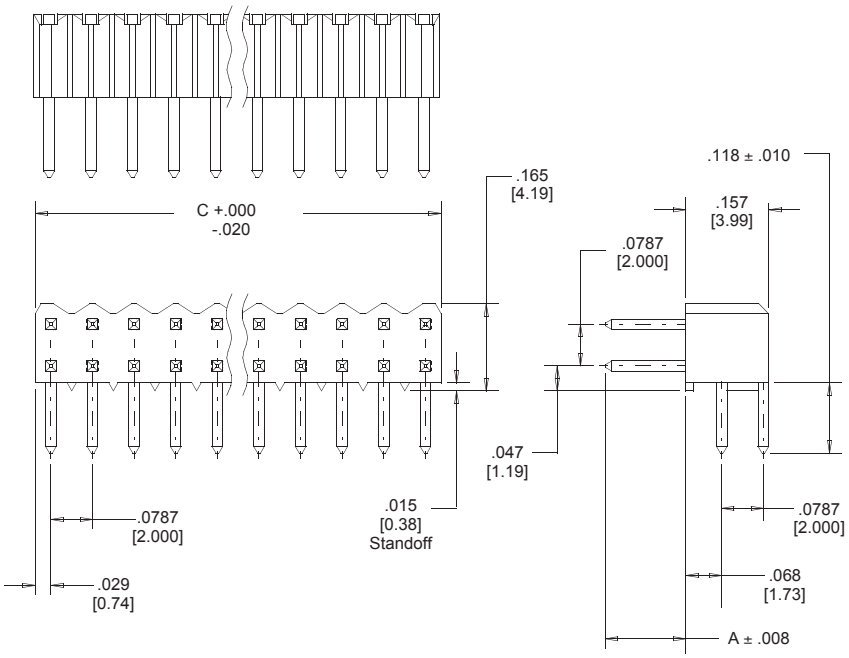
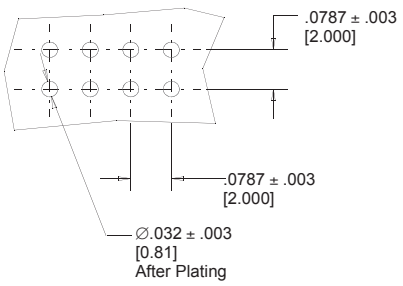
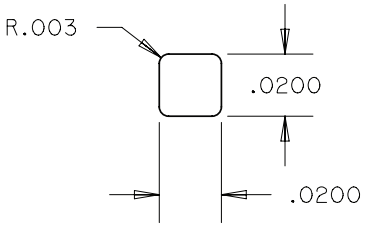
Right Angle





Recommended Mounting Hole Pattern



Pin Cross Section

Contact Quantity	Dimension C
04	0.157 [4.0]
06	0.236 [6.0]
08	0.315 [8.0]
10	0.394 [10.0]
12	0.472 [12.0]
14	0.551 [14.0]
16	0.63 [16.0]
18	0.709 [18.0]
20	0.787 [20.0]
22	0.866 [22.0]
24	0.945 [24.0]
26	1.024 [26.0]
28	1.102 [28.0]
30	1.181 [30.0]
32	1.26 [32.0]
34	1.339 [34.0]
36	1.417 [36.0]
38	1.496 [38.0]
40	1.575 [40.0]
42	1.654 [42.0]
44	1.732 [44.0]
46	1.811 [46.0]
48	1.89 [48.0]
50	1.969 [50.0]
52	2.047 [52.0]
54	2.126 [54.0]
56	2.205 [56.0]
58	2.283 [58.0]
60	2.362 [60.0]
80	3.15 [80.0]

mm
[Inch]

Tolerance Unless Noted		
	in.	mm
0.X	-	±0.5
0.XX	±0.01	±0.25
0.XXX	±0.005	±0.13

[ ] Dimensions for Reference Only

c RU RU

Ordering Information

1512XX-7X22-RB (RIA E1 & C1 Apply)

- Contact Quantity (See Table 1)
- Pin Length Dim 'A'
  - 3 = .130"
  - 4 = .152"

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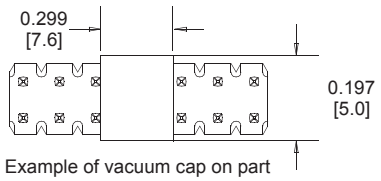
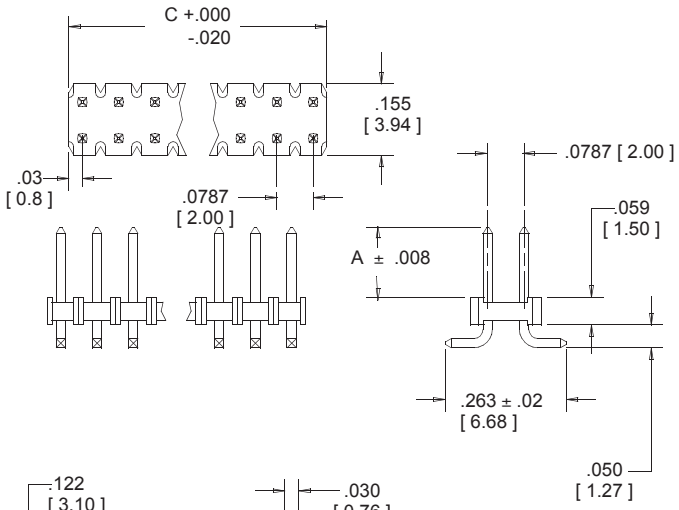
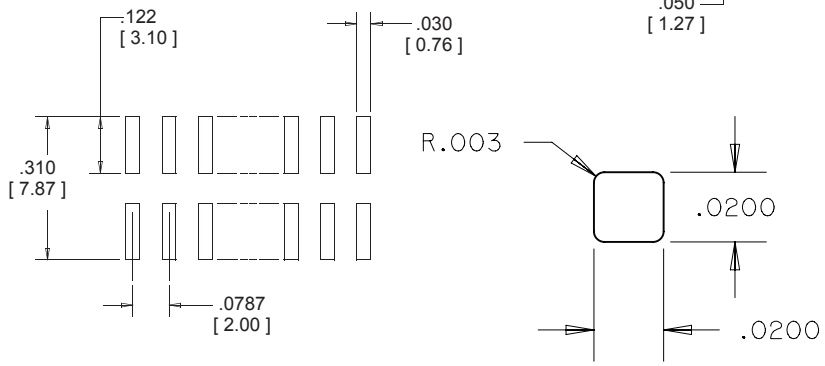


Example of vacuum cap on part





Recommended PCB Pad Layout

Pin Cross Section

Contact Quantity	Dimension C	Tape Width	Order Code
04	0.157 [4.0]	n/a	n/a
06	0.236 [6.0]	n/a	n/a
08	0.315 [8.0]	24 mm	WB
10	0.394 [10.0]	24 mm	WC
12	0.472 [12.0]	24 mm	WC
14	0.551 [14.0]	24 mm	WC
16	0.63 [16.0]	24 mm	WC
18	0.709 [18.0]	32 mm	WC
20	0.787 [20.0]	32 mm	WC
22	0.866 [22.0]	44 mm	WD
24	0.945 [24.0]	44 mm	WD
26	1.024 [26.0]	44 mm	WD
28	1.102 [28.0]	44 mm	WD
30	1.181 [30.0]	44 mm	WD
32	1.26 [32.0]	56 mm	WE
34	1.339 [34.0]	56 mm	WE
36	1.417 [36.0]	56 mm	WE
38	1.496 [38.0]	56 mm	WE
40	1.575 [40.0]	56 mm	WE
42	1.654 [42.0]	56 mm	WE
44	1.732 [44.0]	72 mm	WF
46	1.811 [46.0]	72 mm	WF
48	1.89 [48.0]	72 mm	WF
50	1.969 [50.0]	72 mm	WF
52	2.047 [52.0]	72 mm	WF
54	2.126 [54.0]	72 mm	WF
56	2.205 [56.0]	72 mm	WF
58	2.283 [58.0]	88 mm	WG
60	2.362 [60.0]	88 mm	WG
80	3.15 [80.0]	n/a	n/a

Notes: 1.Tape & reel include vacuum pick-up cap for pick n place handling equipment.

2. Parts in tray packaging are supplied without vacuum cap.

mm
[Inch]

Tolerance Unless Noted		
	in.	mm
0.X	-	±0.5
0.XX	±0.01	±0.25
0.XXX	±0.005	±0.13

[ ] Dimensions for Reference Only

Ordering Information

1512XX-2X20-RB-XX (RIA E1 & C1 Apply)

- Contact Quantity (See Table 1)
- Pin Length Dim 'A' 3 = .130" 4 = .152"
- Packaging suffix: Blank = Tray Packaging WX = Tape & Reel Packaging (see table 1)

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