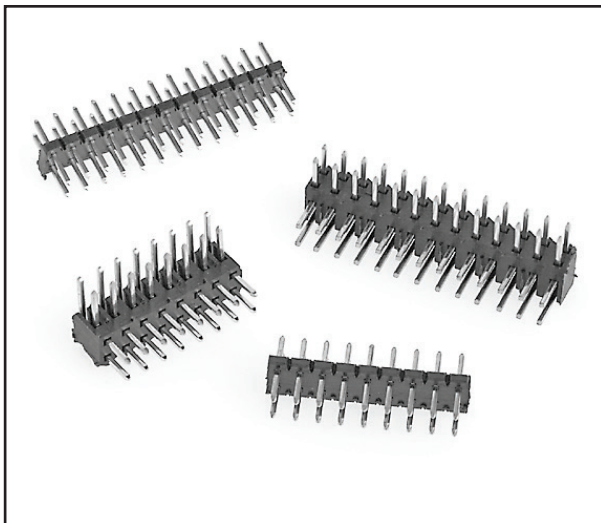


# 3M™ Pin Strip Header

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](http://www.3Mconnectors.com) for compliance information (RIA E1 & C1 apply)

Date Modified: January 14, 2013

TS-0808-H  
Sheet 1 of 4

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## 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<sub>DC</sub>

**Withstanding Voltage:** 500 V<sub>RMS</sub> at Sea Level

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## 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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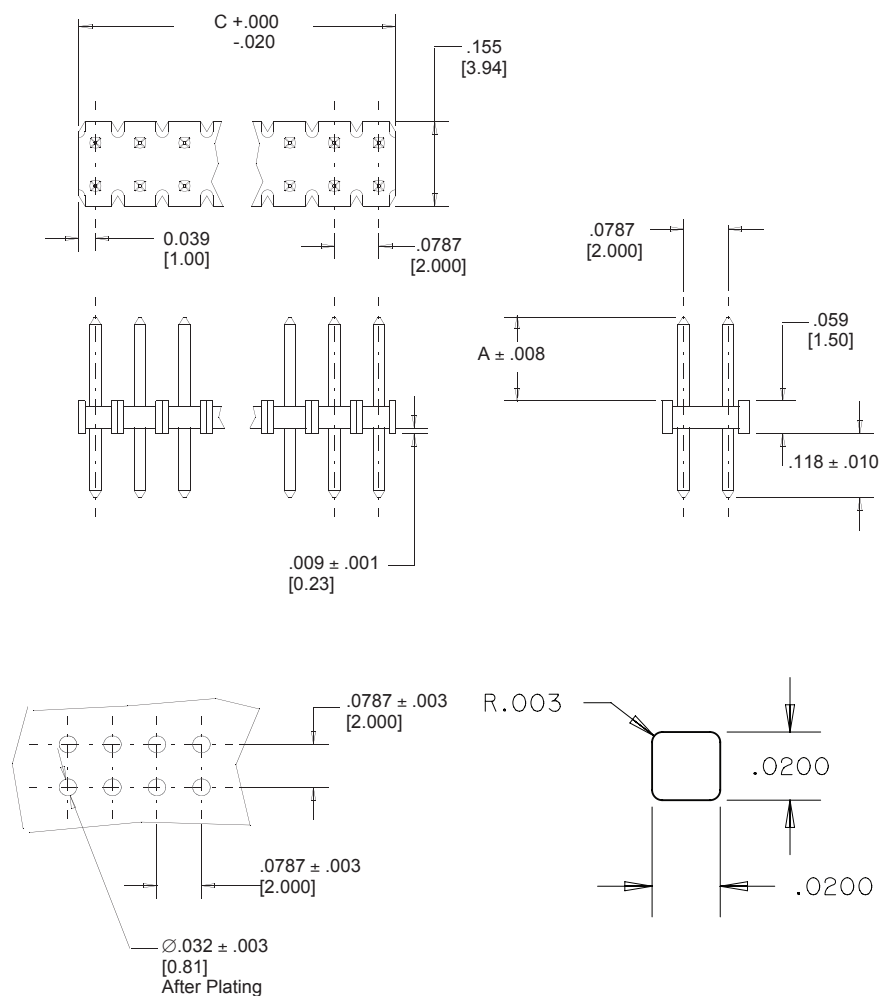
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# 3M™ Pin Strip Header

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

1512 Series

## 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"

TS-0808-H  
Sheet 2 of 4



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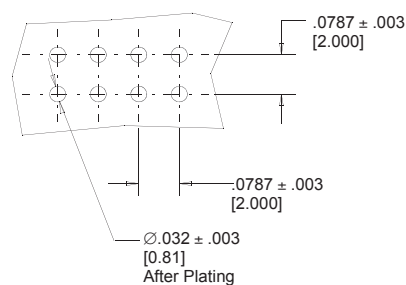
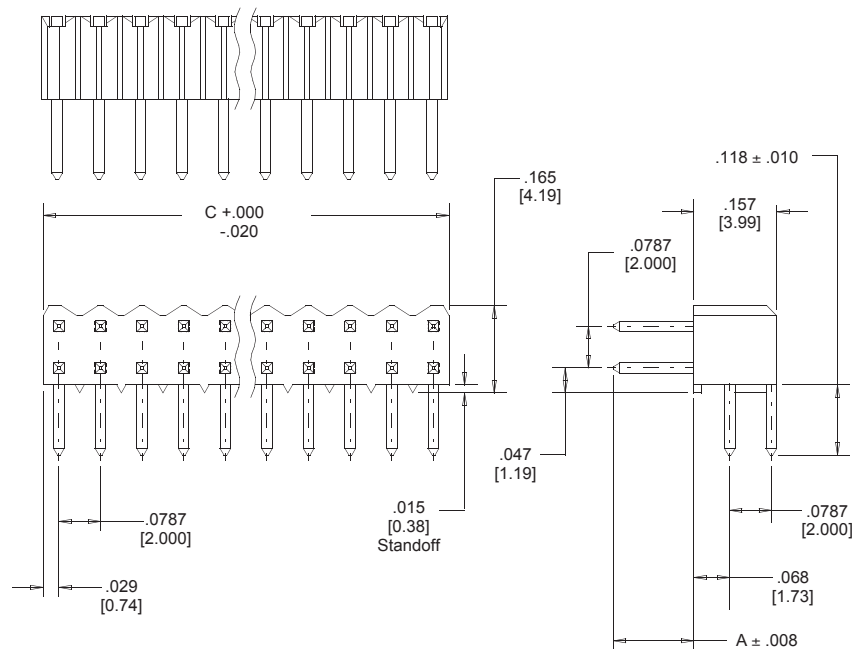
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# 3M™ Pin Strip Header

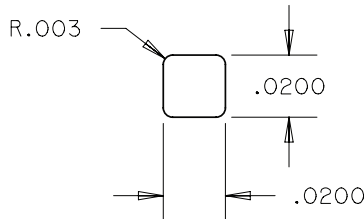
2 mm × 2 mm Solder Tail Straight & Right Angle, Surface Mount Straight

1512 Series

## 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                    | -           | $\pm 0.5$  |
| 0.XX                   | $\pm 0.01$  | $\pm 0.25$ |
| 0.XXX                  | $\pm 0.005$ | $\pm 0.13$ |

[ ] Dimensions for Reference Only



## Ordering Information

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

Contact Quantity  
(See Table 1)

Pin Length  
Dim 'A'  
3 = .130"  
4 = .152"

TS-0808-H  
Sheet 3 of 4



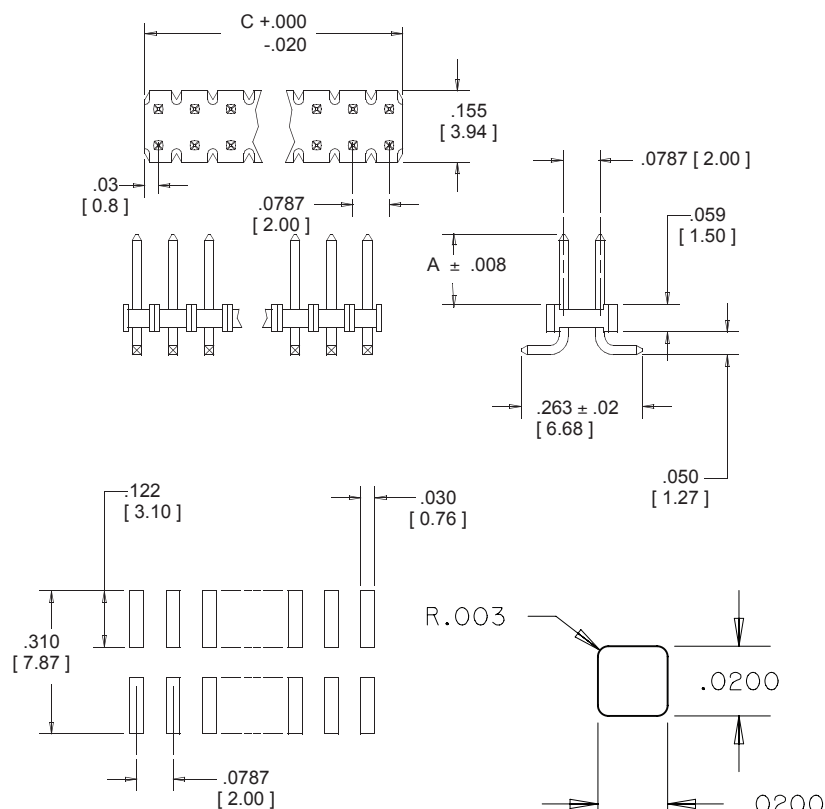
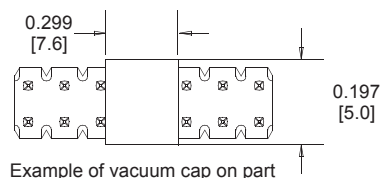
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# 3M™ Pin Strip Header

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

1512 Series



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<br>[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)

TS-0808-H  
Sheet 4 of 4



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