# 3M™ HDC Socket

.100” Right Angle, PCB, 3 or 4-Row, Solder Tail or Press-Fit HDC Series

- High density 3-row version, up to 240 contacts single bay
- Mates with 3-row single plugs and headers
- High density 4-row version, up to 320 contacts single bay
- Mates with 4-row single plugs and headers
- Low 2 oz. insertion force
- 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: May 14, 2013



## Physical

| | |
|---|---|
| **Insulation:** | |
| Material: | Glass Filled Thermoplastic (LCP) |
| Flammability: | UL 94V-0 |
| Color: | Black |
| **Contact:** | |
| Material: | Copper Alloy |
| **Plating:** | |
| Underplating: | 50 µ” [ 1.27 µm ] min. Nickel |
| Wiping Area: | See Ordering Information |
| Termination Area: | See Ordering Information |
| **Marking:** | Part Number and Date Code |

## Electrical

| | |
|---|---|
| **Current Rating:** | 3.0 A per contact |
| **Insulation Resistance:** | 1 x $10^3$ MΩ min. at 500 $V_{DC}$ |
| **Withstanding Voltage:** | 900 $V_{AC}$ for 1 minute |

## Environmental

| | |
|---|---|
| **Temperature Rating:** | -55°C to +125°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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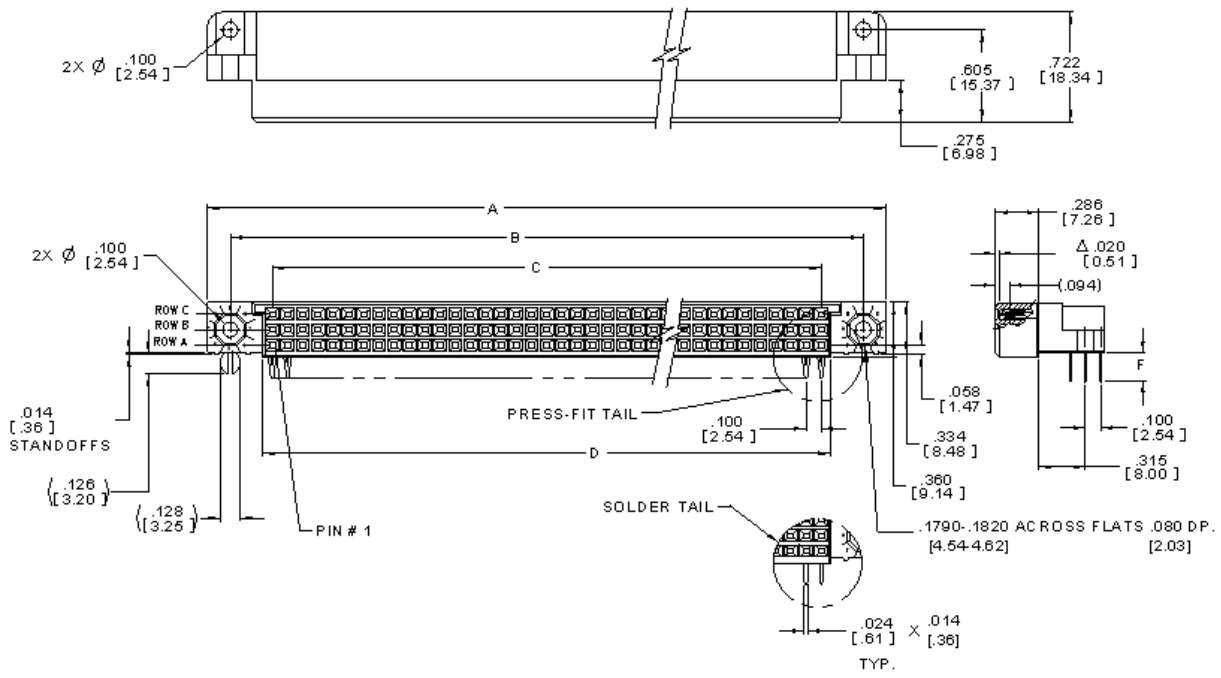
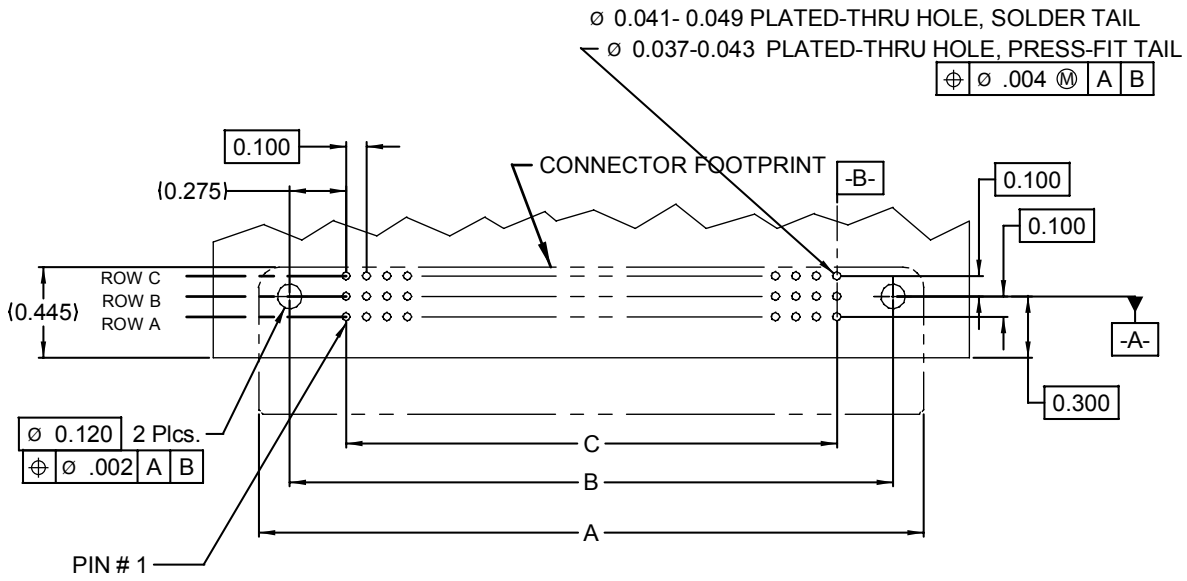
**800-225-5373**

## 3-Row Single Bay




RECOMMENDED P.C.B. HOLE PATTERN

Inch
[mm]

| Tolerance Unless Noted | | | |
|---|---|---|---|
| | .0 | .00 | .000 |
| Inch | ±.1 | ±.01 | ±.005 |

[ ] Dimensions for Reference only

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**Product Table/Dimensions for 3- Row, Single Bay**

| Description | Contact Quantity | A | B | C | D |
|---|---|---|---|---|---|
| HDC-S045-31XX-XXXX | 45 | 2.250 [57.15] | 1.950 [49.53] | 1.400 [35.56] | 1.524 [38.71] |
| HDC-S075-31XX-XXXX | 75 | 3.250 [82.55] | 2.950 [74.93] | 2.400 [60.96] | 2.524 [64.11] |
| HDC-S090-31XX-XXXX | 90 | 3.750 [95.25] | 3.450 [87.63] | 2.900 [73.66] | 3.024 [76.81] |
| HDC-S096-31XX-XXXX | 96 | 3.950 [100.33] | 3.650 [92.71] | 3.100 [78.74] | 3.224 [81.89] |
| HDC-S102-31XX-XXXX | 102 | 4.150 [105.41] | 3.850 [97.79] | 3.300 [83.82] | 3.424 [86.97] |
| HDC-S120-31XX-XXXX | 120 | 4.750 [120.65] | 4.450 [113.03] | 3.900 [99.06] | 4.024 [102.21] |
| HDC-S135-31XX-XXXX | 135 | 5.250 [133.35] | 4.950 [125.73] | 4.400 [111.76] | 4.524 [114.91] |
| HDC-S150-31XX-XXXX | 150 | 5.750 [146.05] | 5.450 [138.43] | 4.900 [124.46] | 5.024 [127.61] |
| HDC-S165-31XX-XXXX | 165 | 6.250 [158.75] | 5.950 [151.13] | 5.400 [137.16] | 5.524 [140.31] |
| HDC-S180-31XX-XXXX | 180 | 6.750 [171.45] | 6.450 [163.83] | 5.900 [149.86] | 6.024 [153.01] |
| HDC-S195-31XX-XXXX | 195 | 7.250 [184.15] | 6.950 [176.53] | 6.400 [162.56] | 6.524 [165.71] |
| HDC-S210-31XX-XXXX | 210 | 7.750 [196.85] | 7.450 [189.23] | 6.900 [175.26] | 7.024 [178.41] |
| HDC-S225-31XX-XXXX | 225 | 8.250 [209.55] | 7.950 [201.93] | 7.400 [187.96] | 7.524 [191.11] |
| HDC-S228-31XX-XXXX | 228 | 8.350 [212.09] | 8.050 [204.47] | 7.500 [190.50] | 7.624 [193.65] |
| HDC-S240-31XX-XXXX | 240 | 8.750 [222.25] | 8.450 [214.63] | 7.900 [200.66] | 8.024 [203.81] |

## Ordering Information

**HDC - SXXX - X1XX - XXXX**

Contact Quantity
See Contact Quantities on Product Table/ Dimensions Charts

Row Quantity
3 = Three Row
4 = Four Row

Plating Options: (See Plating Chart)

**Plating Chart**

| Plating Suffix | Press-Fit Terminations | Solder Tail Terminations | Plating composition |
|---|---|---|---|
| KR | (RIA E1 & C1 apply) | (RIA E1 & C1 apply) | 30 µ" [0.76 µm] Min. Au on Area 1<br>100 µ" [2.54 µm] Min. Whisker Mitigating Matte Tin on Area 4<br>50 µ" [1.27 µm] Min. Ni all over |

Insulator Options
1 = Single bay insulator

Termination Style / Lead length - Dim. F
P1 - Press-fit Right Angle / 0.157" (4.00)
S1 - Solder Right Angle / 0.110" (2.79)
S2 - Solder Tail / 0.160" (4.06)




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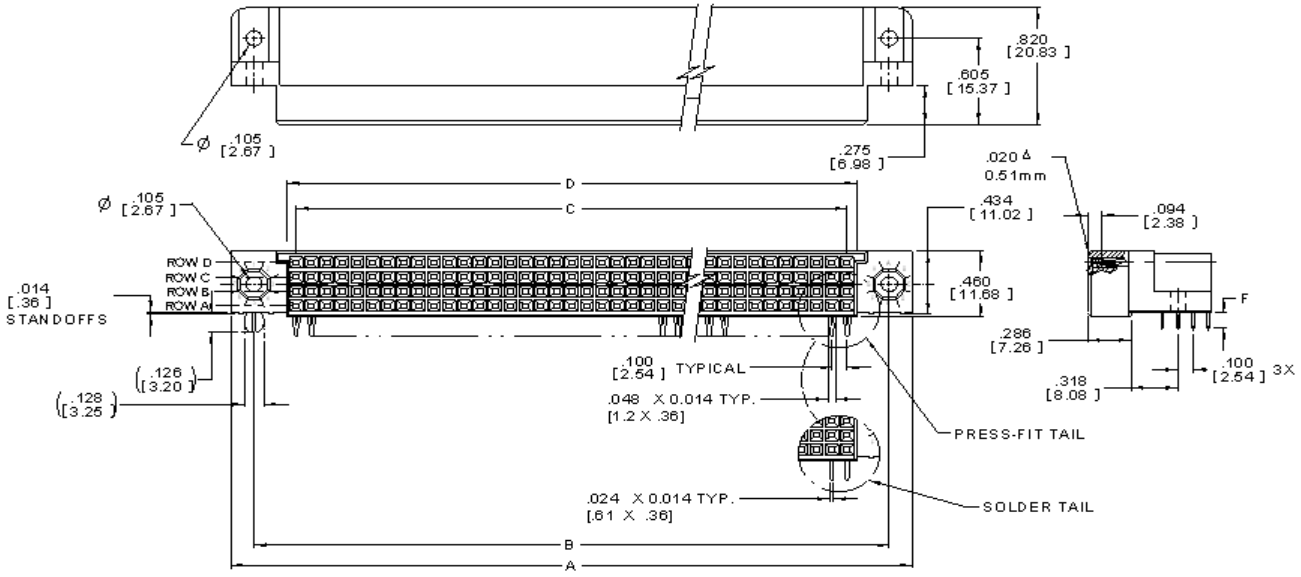
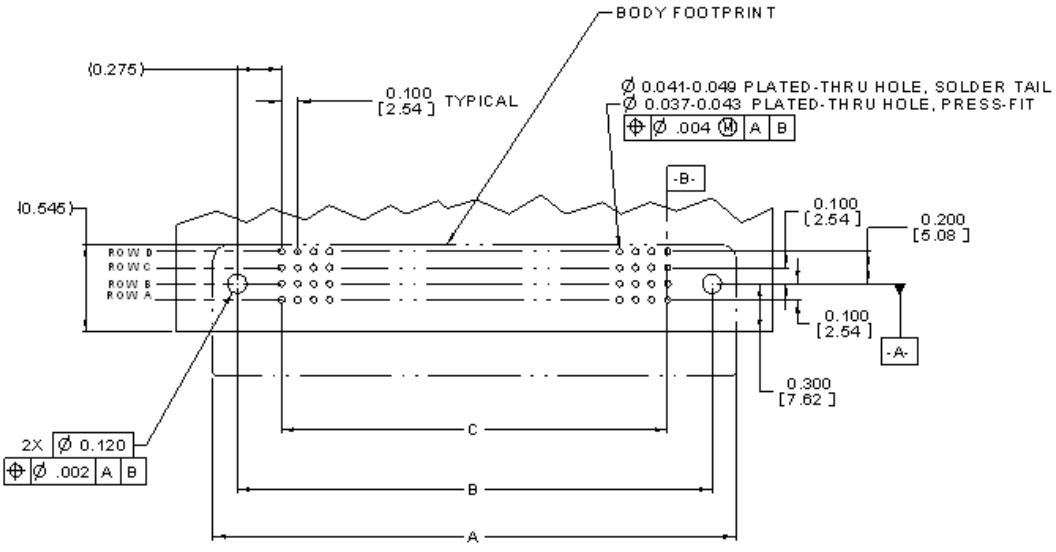
## 4-Row Single Bay

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TS-1137-D
Sheet 4 of 5




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| Product Table/Dimensions for 4-Row Socket Single Bay | | | | | |
|---|---|---|---|---|---|
| **Description** | **Pin Quantity** | **A** | **B** | **C** | **D** |
| HDC-S060-41XX-XXXX | 60 | 2.250 [57.15] | 1.950 [49.53] | 1.400 [49.53] | 1.524 [38.71] |
| HDC-S076-41XX-XXXX | 76 | 2.650 [67.31] | 2.350 [59.69] | 1.800 [45.72] | 1.924 [48.87] |
| HDC-S080-41XX-XXXX | 80 | 2.750 [69.85] | 2.450 [62.23] | 1.900 [48.26] | 2.024 [51.41] |
| HDC-S100-41XX-XXXX | 100 | 3.250 [82.55] | 2.950 [74.93] | 2.400 [60.96] | 2.524 [64.11] |
| HDC-S120-41XX-XXXX | 120 | 3.750 [95.25] | 3.450 [87.63] | 2.900 [73.66] | 3.024 [76.81] |
| HDC-S128-41XX-XXXX | 128 | 3.950 [100.33] | 3.650 [92.71] | 3.100 [78.74] | 3.224 [81.89] |
| HDC-S140-41XX-XXXX | 140 | 4.250 [107.95] | 3.950 [100.33] | 3.400 [86.36] | 3.524 [89.51] |
| HDC-S160-41XX-XXXX | 160 | 4.750 [120.65] | 4.450 [113.03] | 3.900 [99.06] | 4.024 [102.21] |
| HDC-S168-41XX-XXXX | 168 | 4.950 [125.73] | 4.650 [118.11] | 4.100 [104.14] | 4.224 [107.29] |
| HDC-S180-41XX-XXXX | 180 | 5.250 [133.35] | 4.950 [125.73] | 4.400 [111.76] | 4.524 [114.91] |
| HDC-S200-41XX-XXXX | 200 | 5.750 [146.05] | 5.450 [138.43] | 4.900 [124.46] | 5.024 [127.61] |
| HDC-S216-41XX-XXXX | 216 | 6.150 [156.21] | 5.850 [148.59] | 5.300 [134.62] | 5.424 [137.77] |
| HDC-S220-41XX-XXXX | 220 | 6.250 [158.75] | 5.950 [151.13] | 5.400 [137.16] | 5.524 [140.31] |
| HDC-S240-41XX-XXXX | 240 | 6.750 [171.45] | 6.450 [163.83] | 5.900 [149.86] | 6.024 [153.01] |
| HDC-S260-41XX-XXXX | 260 | 7.250 [184.15] | 6.950 [176.53] | 6.400 [162.56] | 6.524 [165.71] |
| HDC-S280-41XX-XXXX | 280 | 7.750 [196.85] | 7.450 [189.23] | 6.900 [175.26] | 7.024 [178.41] |
| HDC-S300-41XX-XXXX | 300 | 8.250 [209.55] | 7.950 [209.55] | 7.400 [187.96] | 7.524 [191.11] |
| HDC-S320-41XX-XXXX | 320 | 8.750 [222.25] | 8.450 [214.63] | 7.900 [200.66] | 8.024 [203.81] |




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RIA-2217B-E

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