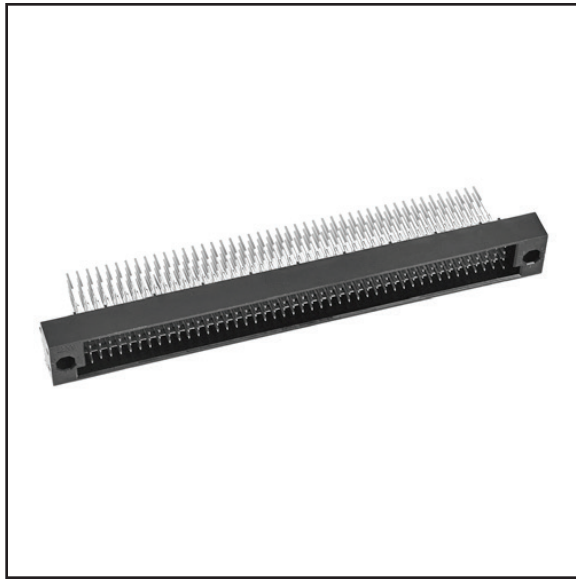


# 3M™ HDC Header

.100" Vertical Mount, PCB/Backplane, Solder Tail or Press-Fit

HDC Series



- High density, up to 240 contacts single bay
- Early Mate Late Break (EMLB) grounding contacts for hot swapping
- Mates with three-row and four-row sockets
- 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: May 14, 2013

TS-1136-E  
Sheet 1 of 5

---

## Physical

**Insulation:**

Material: Glass Filled Thermoplastic (LCP)

Flammability: UL 94V-0

Color: Black

**Contact:**

Material: Copper Alloy

**Plating:**

Underplating: 50  $\mu$ " [ 1.27  $\mu$ m ] min. Nickel

Wiping Area: See Ordering Information

Termination Area: See Ordering Information

**Marking:** Part Number and Date Code

---

## Electrical

**Current Rating:** 3.0 A

**Insulation Resistance:**  $1 \times 10^3$  M  $\Omega$  min. at 500 V<sub>DC</sub>

**Withstanding Voltage:** 900 V<sub>AC</sub> for 1 minute

---

## 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

---

**3M**

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

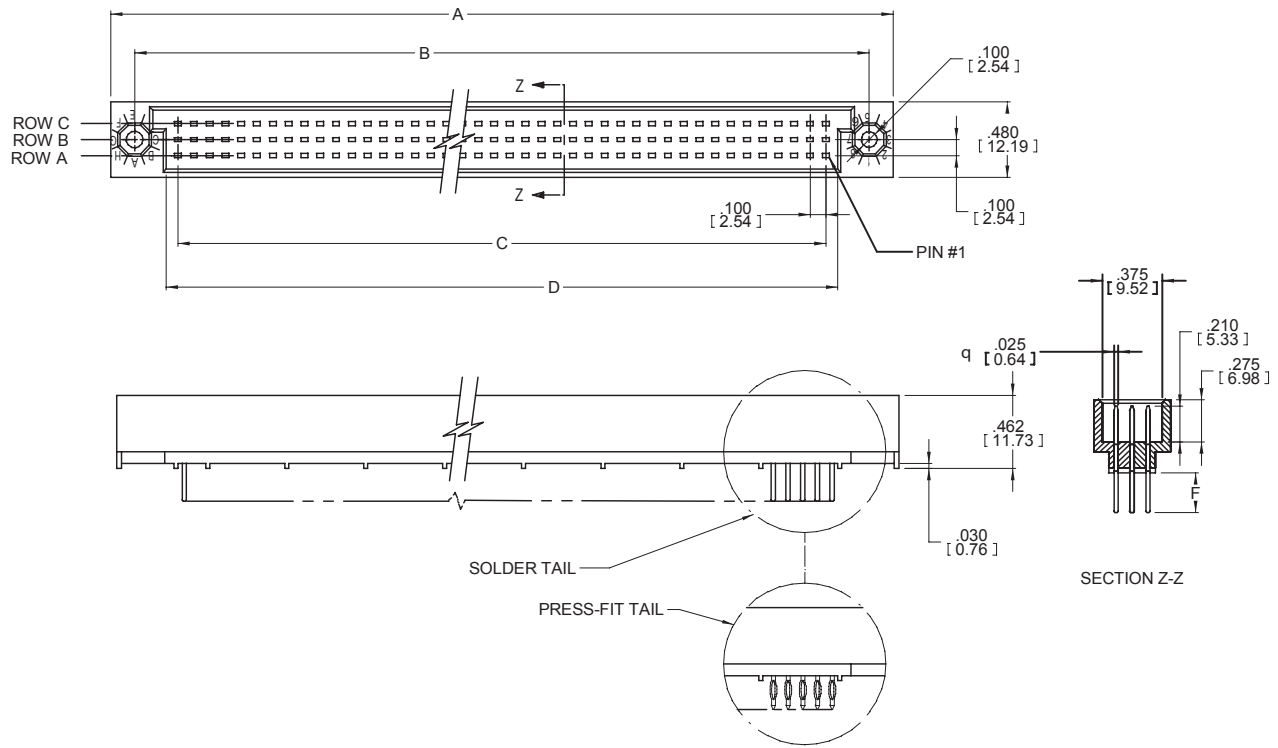
3M is a trademark of 3M Company.  
For technical, sales or ordering information call  
**800-225-5373**

# 3M™ HDC Header

.100" Vertical Mount, PCB/Backplane, Solder Tail or Press-Fit

HDC Series

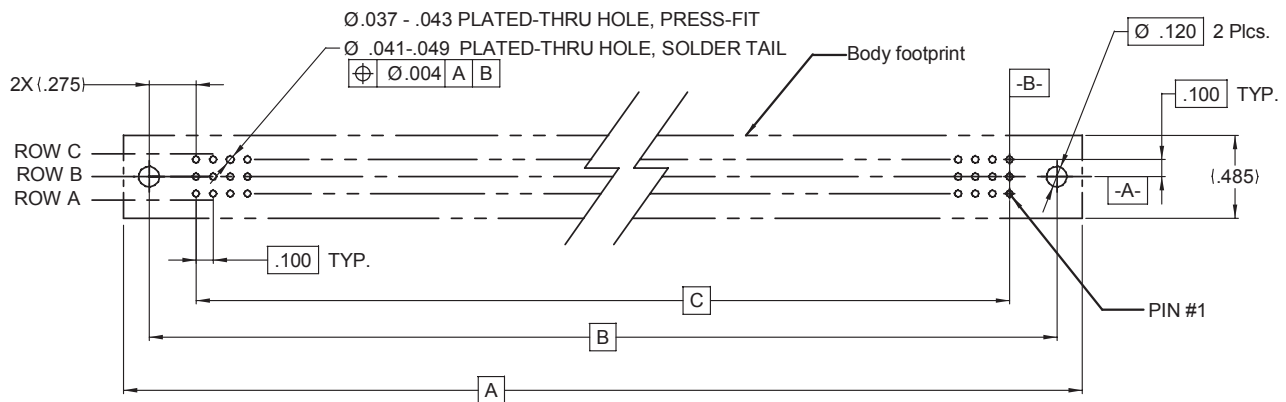
## 3-Row Single Bay



Inch  
[mm]

Tolerance Unless Noted			
	.0	.00	.000
inch	±.1	±.01	±.005

[ ] Dimensions for Reference Only



RECOMMENDED P.C.B. HOLE PATTERN

TS-1136-E  
Sheet 2 of 5

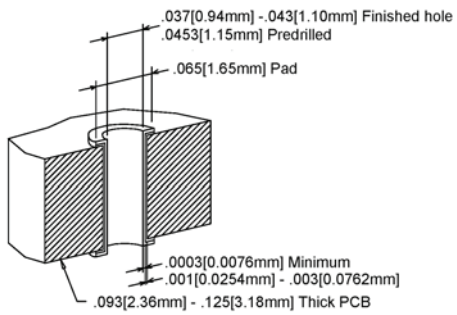
# 3M™ HDC Header

.100" Vertical Mount, PCB/Backplane, Solder Tail or Press-Fit

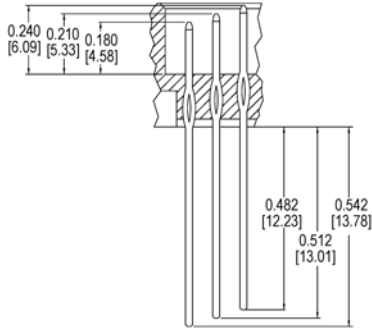
HDC Series

Description	Pin Quantity	A	B	C	D
HDC-H045-31XX-XXXX	45	2.250 [57.15]	1.950 [49.53]	1.400 [35.56]	1.550 [39.37]
HDC-H072-31XX-XXXX	72	3.150 [80.01]	2.850 [72.39]	2.300 [58.42]	2.300 [62.23]
HDC-H075-31XX-XXXX	75	3.250 [82.55]	2.950 [74.93]	2.400 [60.96]	2.550 [64.77]
HDC-H090-31XX-XXXX	90	3.750 [95.25]	3.450 [87.63]	2.900 [73.66]	3.050 [77.47]
HDC-H096-31XX-XXXX	96	3.950 [100.33]	3.650 [92.71]	3.100 [78.74]	3.250 [82.55]
HDC-H102-31XX-XXXX	102	4.150 [105.41]	3.850 [97.79]	3.300 [83.82]	3.450 [87.63]
HDC-H120-31XX-XXXX	120	4.750 [120.65]	4.450 [113.03]	3.900 [113.03]	4.050 [102.87]
HDC-H135-31XX-XXXX	135	5.250 [133.35]	4.950 [125.73]	4.400 [111.76]	4.550 [115.57]

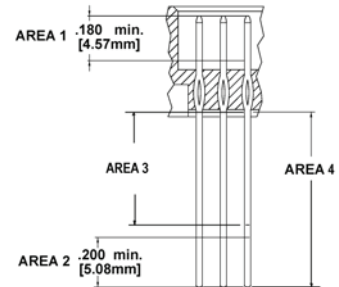
Description	Pin Quantity	A	B	C	D
HDC-H150-31XX-XXXX	150	5.750 [146.05]	5.450 [138.43]	4.900 [124.46]	5.050 [128.27]
HDC-H165-31XX-XXXX	165	6.250 [158.75]	5.950 [151.13]	5.400 [137.16]	5.550 [140.97]
HDC-H180-31XX-XXXX	180	6.750 [171.45]	6.450 [163.83]	5.900 [149.86]	6.050 [153.67]
HDC-H195-31XX-XXXX	195	7.250 [184.15]	6.950 [176.53]	6.400 [162.56]	6.550 [166.37]
HDC-H210-31XX-XXXX	210	7.750 [196.85]	7.450 [189.23]	6.900 [175.26]	7.050 [179.07]
HDC-H225-31XX-XXXX	225	8.250 [209.55]	7.950 [201.93]	7.400 [187.96]	7.550 [191.77]
HDC-H228-31XX-XXXX	228	8.350 [212.09]	8.050 [204.47]	7.500 [190.50]	7.650 [194.31]
HDC-H240-31XX-XXXX	240	8.750 [222.25]	8.450 [214.63]	7.900 [200.66]	8.050 [204.47]



PCB HOLE SPECIFICATION FOR COMPLIANT PIN INSTALLATION



EXAMPLE "EMLB"



Plating Description

## Ordering Information

### HDC - HXXX - X1XX - XXXX

Pin Quantity:  
See Table

Row Options  
3 = 3 Rows  
4 = 4 Rows

Insulator Options  
1 = Single bay insulator

Termination Style / Lead length - Dim. F  
P1 - Press-fit / 0.200" (5.08)  
P2 - Press-fit / 0.533" (13.54)  
S1 - Solder Tail / 0.190" (4.83)

Plating Options:  
(See Plating Chart)

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

Plating Suffix	Press-Fit Terminations	Solder Tail Terminations	Plating composition
KV	(RIA E1 & C1 apply)	(RIA E1 & C1 apply)	30 $\mu$ " [0.76 $\mu$ m] Min. Au on area 1 3 $\mu$ " [0.08 $\mu$ m] Min. Au on area 2 3 $\mu$ " [0.08 $\mu$ m] Min. Au on area 3 50 $\mu$ " [1.27 $\mu$ m] Min. Ni all over

TS-1136-E  
Sheet 3 of 5

3M

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

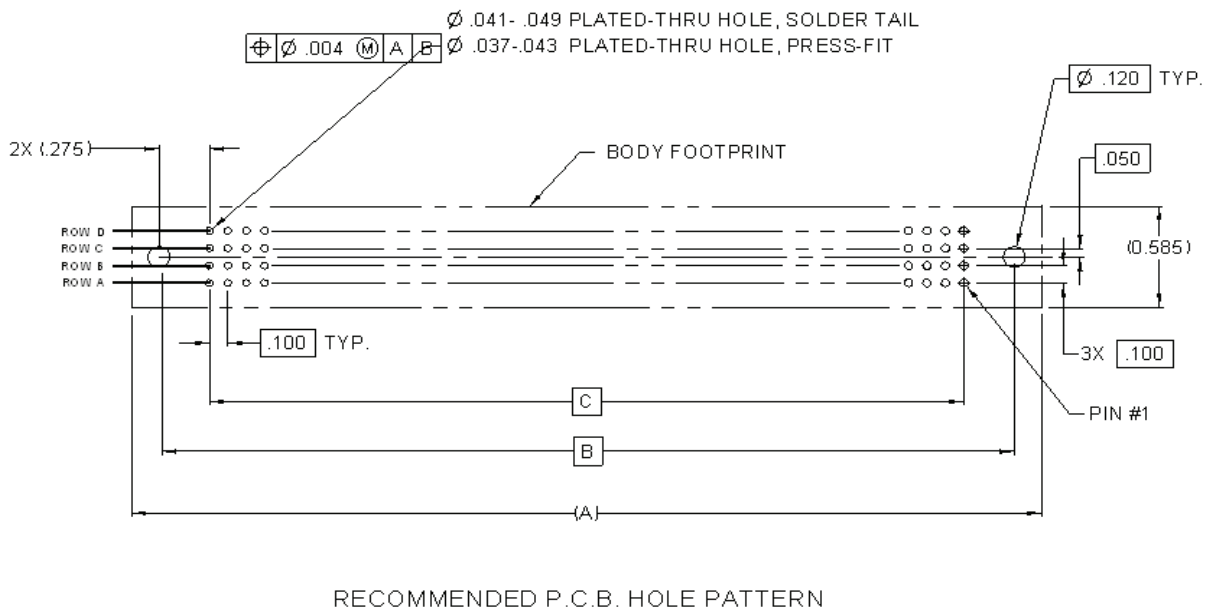
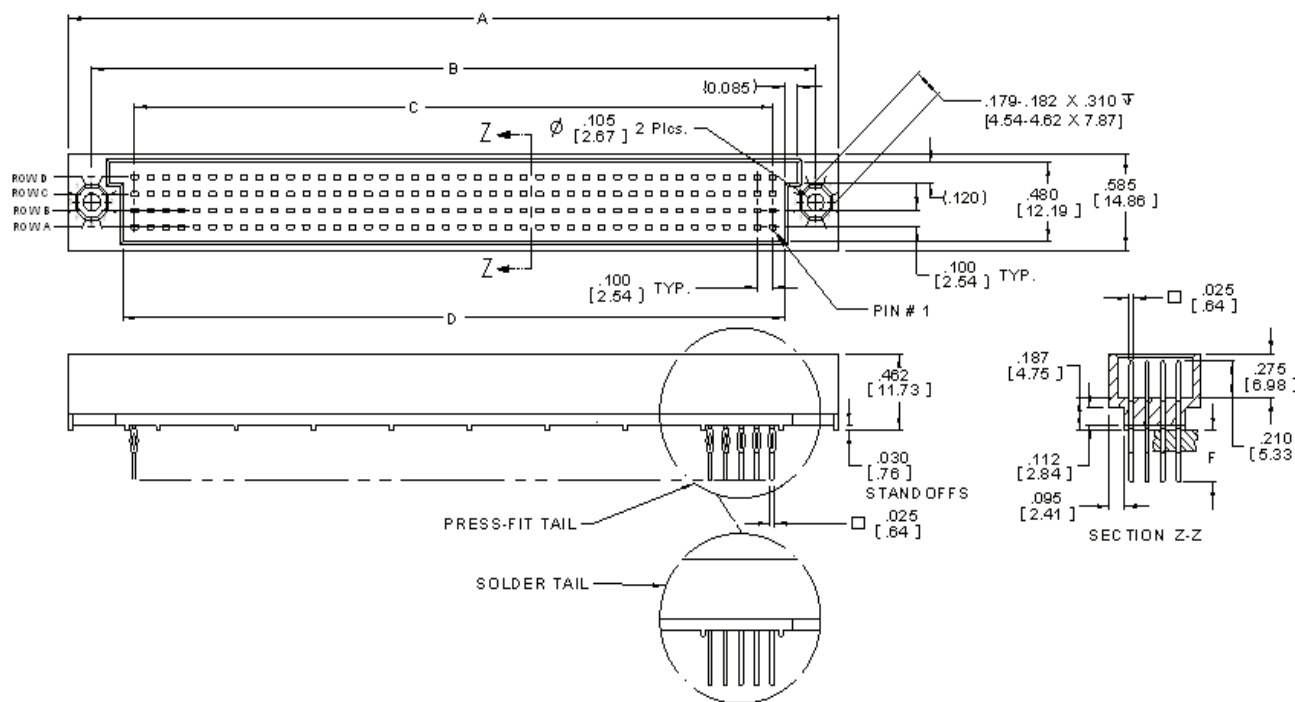
3M is a trademark of 3M Company.  
For technical, sales or ordering information call  
**800-225-5373**

# 3M™ HDC Header

.100" Vertical Mount, PCB/Backplane, Solder Tail or Press-Fit

HDC Series

## 4-Row Single Bay



RECOMMENDED P.C.B. HOLE PATTERN

# 3M™ HDC Header

.100" Vertical Mount, PCB/Backplane, Solder Tail or Press-Fit

HDC Series

Product Table/Dimensions for 4-Row, Single Bay					
Description	Pin Quantity	A	B	C	D
HDC-H060-41XX-XXXX	60	2.250 [57.15]	1.950 [49.53]	1.400 [49.53]	1.550 [39.37]
HDC-H076-41XX-XXXX	76	2.650 [67.31]	2.350 [59.69]	1.800 [45.72]	1.950 [49.53]
HDC-H080-41XX-XXXX	80	2.750 [69.85]	2.450 [62.23]	1.900 [48.26]	1.900 [52.07]
HDC-H100-41XX-XXXX	100	3.250 [82.55]	2.950 [74.93]	2.400 [60.96]	2.550 [60.96]
HDC-H120-41XX-XXXX	120	3.750 [95.25]	3.450 [87.63]	2.900 [73.66]	3.050 [87.63]
HDC-H128-41XX-XXXX	128	3.950 [100.33]	3.650 [92.71]	3.100 [78.74]	3.250 [82.55]
HDC-H140-41XX-XXXX	140	4.250 [107.95]	3.950 [100.33]	3.400 [86.36]	3.550 [90.17]
HDC-H160-41XX-XXXX	160	4.750 [120.65]	4.450 [113.03]	3.900 [99.06]	4.050 [102.87]
HDC-H168-41XX-XXXX	168	4.950 [125.73]	4.650 [118.11]	4.100 [104.14]	4.250 [107.95]
HDC-H180-41XX-XXXX	180	5.250 [133.35]	4.950 [125.73]	4.400 [111.76]	4.550 [115.57]
HDC-H200-41XX-XXXX	200	5.750 [146.05]	5.450 [138.43]	4.900 [124.46]	5.050 [128.27]
HDC-H216-41XX-XXXX	216	6.150 [156.21]	5.850 [148.59]	5.300 [134.62]	5.450 [138.43]
HDC-H220-41XX-XXXX	220	6.250 [158.75]	5.950 [151.13]	5.400 [137.16]	5.550 [140.97]
HDC-H240-41XX-XXXX	240	6.750 [171.45]	6.450 [163.83]	5.900 [149.86]	6.050 [149.86]
HDC-H260-41XX-XXXX	260	7.250 [184.15]	6.950 [176.53]	6.400 [162.56]	6.550 [166.37]
HDC-H280-41XX-XXXX	280	7.750 [196.85]	7.450 [189.23]	6.900 [175.26]	7.050 [179.07]
HDC-H300-41XX-XXXX	300	8.250 [209.55]	7.950 [209.55]	7.400 [187.96]	7.550 [191.77]
HDC-H320-41XX-XXXX	320	8.750 [222.25]	8.450 [214.63]	7.900 [200.66]	8.050 [204.47]

TS-1136-E  
Sheet 5 of 5

### **Important Notice**

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product which are not contained in 3M's current publications, or any contrary statements contained on your purchase order shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

### **Warranty; Limited Remedy; Limited Liability.**

This product will be free from defects in material and manufacture for a period of ninety (90) days from the time of purchase. **3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE.** If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. **Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.**



#### **3M Electronics Solutions Division**

6801 River Place Blvd.  
Austin, TX 78726-9000  
U.S.A.  
1-800-225-5373  
[www.3Mconnectors.com](http://www.3Mconnectors.com)

Please recycle. Printed in USA.  
© 3M 2013. All rights reserved.  
RIA-2217B-E

3M is a trademark of 3M Company.

# Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

3M:

[HDC-H102-31P1-KV](#)