

## **Electronics**

# .8mm Free Height (FH) Connector System

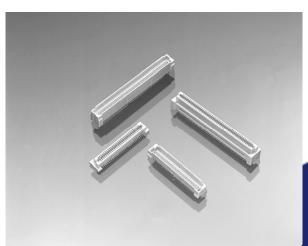
# Now offering 30u" Gold Plating Options and Right Angle Plugs

### **DESCRIPTION**

The popular .8mm FH connector system is now available with 30u" Gold Plating. In addition, a right angle plug in 60 and 80 positions is also available. The right angle plug product is a thru-hole, while the balance of the product line remains surface mount.

### **APPLICATION**

The 30u" Gold product is intended for stacking applications in high end Computer, Telecommunications, Industrial, and Mil/Aero applications. The right angle plug is ideal for test cards and card extenders, and mates to standard vertical receptacles.



## **KEY FEATURES**

- Available Position Sizes: 40 thru 200 positions in increments of 20 positions
- Stack Height Options: 5mm thru 16mm in increments of 1mm
- Tube, Tube with Pickup Cap, and Tape and Reel Packaging Options
- Polarized locating posts
- 8u" Gold, and 30u" Gold plating options
- RoHS Compliant numbers available now
- Optional Solder Peg (holddown)
- Right Angle Plugs in 60 and 80 positions

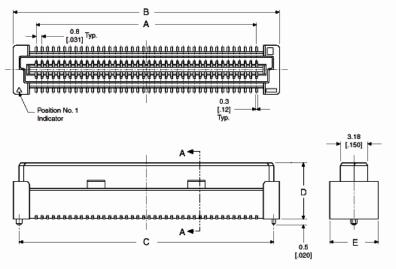
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# **RECEPTACLE PART NUMBERS**

| Height | Plating Au<br>Thickness | Package<br>Type | Pickup<br>Cap | 40pos       | 60pos       | 80pos       | 100pos      | 120pos      | 140pos      | 160pos      | 180pos      | 200pos      |
|--------|-------------------------|-----------------|---------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 5H     | 8u"                     | Tube            | no            | 177983-1    | 177983-2    | 177983-3    | 177983-4    | 177983-5    | 177983-6    | 177983-8    | 177983-9    | 1-177983-0  |
|        |                         | Tube            | yes           | 179229-1    | 179229-2    | 179229-3    | 179229-4    | 179229-5    | 179229-6    | 179229-8    | 179229-9    | 1-179229-0  |
|        |                         | Tape and Reel   | yes           | 177985-1    | 177985-2    | 177985-3    | 177985-4    | 177985-5    | 177985-6    | 177985-8    |             |             |
|        | 30u"                    | Tube            | no            | 1123000-1   | 1123000-2   | 1123000-3   | 1123000-4   | 1123000-5   | 1123000-6   | 1123000-8   | 1123000-9   | 1-1123000-0 |
|        |                         | Tube            | yes           |             |             |             |             |             |             |             |             |             |
|        |                         | Tape and Reel   | yes           | 353999-1    | 353999-2    | 353999-3    | 353999-4    | 353999-5    | 353999-6    | 353999-8    |             |             |
| 9H     | 8u"                     | Tube            | no            | 5-179009-1  | 5-179009-2  | 5-179009-3  | 5-179009-4  | 5-179009-5  | 5-179009-6  | 5-179009-8  | 5-179009-9  | 6-179009-0  |
|        |                         | Tube            | yes           |             | 5-179232-2  | 5-179232-3  | 5-179232-4  | 5-179232-5  | 5-179232-6  | 5-179232-8  | 5-179232-9  | 6-179232-0  |
|        |                         | Tape and Reel   | yes           | 5-179180-1  | 5-179180-2  | 5-179180-3  | 5-179180-4  | 5-179180-5  | 5-179180-6  |             |             |             |
|        | 30u"                    | Tube            | no            | 84613-1     | 84613-2     | 84613-3     | 84613-4     | 84613-5     | 84613-6     | 84613-8     | 84613-9     | 1-84613-0   |
|        |                         | Tube            | yes           |             |             |             |             |             |             |             |             |             |
|        |                         | Tape and Reel   | yes           | 7-179180-1  | 7-179180-2  | 7-179180-3  | 7-179180-4  | 7-179180-5  | 7-179180-6  |             |             |             |
| 13H    | 8u"                     | Tube            | no            | 5-179010-1  | 5-179010-2  | 5-179010-3  | 5-179010-4  | 5-179010-5  | 5-179010-6  | 5-179010-8  | 5-179010-9  | 6-179010-0  |
|        |                         | Tube            | yes           | 5-179233-1  | 5-179233-2  | 5-179233-3  | 5-179233-4  | 5-179233-5  | 5-179233-6  | 5-179233-8  | 5-179233-9  | 6-179233-0  |
|        |                         | Tape and Reel   | yes           | 84616-1     | 84616-2     | 84616-3     | 84616-4     | 84616-5     | 84616-6     | 84616-8     | 84616-9     |             |
|        | 30u"                    | Tube            | no            | 5-1123212-1 | 5-1123212-2 | 5-1123212-3 | 5-1123212-4 | 5-1123212-5 | 5-1123212-6 | 5-1123212-8 | 5-1123212-9 | 6-1123212-0 |
|        |                         | Tube            | yes           |             |             |             |             |             |             |             |             | 7-1123212-0 |
|        |                         | Tape and Reel   | yes           | 84618-1     | 84618-2     | 84618-3     | 84618-4     | 84618-5     | 84618-6     | 84618-8     | 84618-9     |             |

Stack Height = ((Rcpt Height + Plug Height) - 5) example: ((13H Rcpt + 6H Plug) - 5) = ((13 + 6) - 5) = 14mm stack height



| No. of    | Dimensions |       |       |  |
|-----------|------------|-------|-------|--|
| Positions | Α          | В     | С     |  |
| 40        | 15.20      | 21.80 | 20.20 |  |
| 40        | .598       | .858  | .795  |  |
| 60        | 23.20      | 29.80 | 28.20 |  |
| 00        | .913       | 1.173 | 1.110 |  |
| 80        | 31.20      | 37.80 | 36.20 |  |
|           | 1.228      | 1.488 | 1.425 |  |
| 100       | 39.20      | 45.80 | 44.20 |  |
| 100       | 1.543      | 1.803 | 1.740 |  |
| 120       | 47.20      | 53.80 | 52.20 |  |
| 120       | 1.858      | 2.118 | 2.055 |  |
| 140       | 55.20      | 61.80 | 60.20 |  |
| 140       | 2.173      | 2.433 | 2.370 |  |
| 160       | 63.20      | 69.80 | 68.20 |  |
| 100       | 2.488      | 2.748 | 2.685 |  |
| 180       | 71.20      | 77.80 | 76.20 |  |
| 100       | 2.803      | 3.063 | 3.000 |  |
| 200       | 79.20      | 85.80 | 84.20 |  |
| 200       | 3.118      | 3.378 | 3.315 |  |

| Height  | 5H   | 9H   | 13H   |  |
|---------|------|------|-------|--|
| Dim D   | 3.75 | 7.75 | 11.75 |  |
| ט ווווט | .148 | .305 | .483  |  |
| Dim E   | 6.00 | 6.80 | 6.80  |  |
| DIIII E | .236 | .268 | .268  |  |
|         |      |      |       |  |

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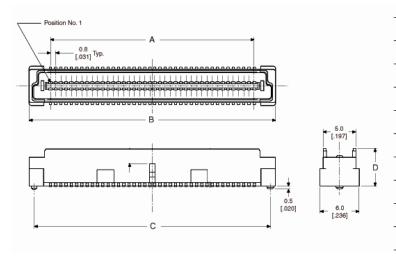
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## **PLUG PART NUMBERS**

| Height | Plating Au<br>Thickness | Package<br>Type | Pickup<br>Cap | 40pos      | 60pos      | 80pos      | 100pos     | 120pos     | 140pos     | 160pos     | 180pos     | 200pos      |
|--------|-------------------------|-----------------|---------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| 5H     | 8u"                     | Tube            | no            | 177984-1   | 177984-2   | 177984-3   | 177984-4   | 177984-5   | 177984-6   | 177984-8   | 177984-9   | 1-177984-0  |
|        |                         | Tube            | yes           | 179230-1   | 179230-2   | 179230-3   | 179230-4   | 179230-5   | 179230-6   | 179230-8   | 179230-9   | 1-179230-0  |
|        |                         | Tape and Reel   | yes           | 177986-1   | 177986-2   | 177986-3   | 177986-4   | 177986-5   | 177986-6   | 177986-8   |            |             |
|        | 30u"                    | Tube            | no            | 84614-1    | 84614-2    | 84614-3    | 84614-4    | 84614-5    | 84614-6    | 84614-8    | 84614-9    | 1-84614-0   |
|        |                         | Tube            | yes           |            |            |            |            |            |            |            |            |             |
|        |                         | Tape and Reel   | yes           | 5-177986-1 | 5-177986-2 | 5-177986-3 | 5-177986-4 | 5-177986-5 | 5-177986-6 | 5-177986-8 |            |             |
| 6H     | 8u"                     | Tube            | no            | 179029-1   | 179029-2   | 179029-3   | 179029-4   | 179029-5   | 179029-6   | 179029-8   | 179029-9   | 1-179029-0  |
|        |                         | Tube            | yes           | 2-179230-1 | 2-179230-2 | 2-179230-3 | 2-179230-4 | 2-179230-5 | 2-179230-6 | 2-179230-8 | 2-179230-9 | 3-179230-0  |
|        |                         | Tape and Reel   | yes           | 1-177986-1 | 1-177986-2 | 1-177986-3 | 1-177986-4 | 1-177986-5 | 1-177986-6 |            |            |             |
|        | 30u"                    | Tube            | no            | 84615-1    | 84615-2    | 84615-3    | 84615-4    | 84615-5    | 84615-6    | 84615-8    | 84615-9    | 1-84615-0   |
|        |                         | Tube            | yes           |            |            |            |            |            |            | 1-84615-8  | 1-84615-9  | 2-84615-0   |
|        |                         | Tape and Reel   | yes           | 6-177986-1 | 6-177986-2 | 6-177986-3 | 6-177986-4 | 6-177986-5 | 6-177986-6 |            |            |             |
| 7H     | 8u"                     | Tube            | no            | 179030-1   | 179030-2   | 179030-3   | 179030-4   | 179030-5   | 179030-6   | 179030-8   | 179030-9   | 1-179030-0  |
|        |                         | Tube            | yes           | 4-179230-1 | 4-179230-2 | 4-179230-3 | 4-179230-4 | 4-179230-5 | 4-179230-6 | 4-179230-8 | 4-179230-9 | 5-179230-0  |
|        |                         | Tape and Reel   | yes           | 2-177986-1 | 2-177986-2 | 2-177986-3 | 2-177986-4 | 2-177986-5 | 2-177986-6 |            |            |             |
|        | 30u"                    | Tube            | no            | 1-179030-1 | 1-179030-2 | 1-179030-3 | 1-179030-4 | 1-179030-5 | 1-179030-6 | 1-179030-8 | 1-179030-9 | 2-179030-0  |
|        |                         | Tube            | yes           | 2-179030-1 | 2-179030-2 | 2-179030-3 | 2-179030-4 | 2-179030-5 | 2-179030-6 | 2-179030-8 | 2-179030-9 | 3-179030-0  |
|        |                         | Tape and Reel   | yes           |            |            |            |            |            |            |            |            |             |
| 8H     | 8u"                     | Tube            | no            | 179031-1   | 179031-2   | 179031-3   | 179031-4   | 179031-5   | 179031-6   | 179031-8   | 179031-9   | 1-179031-0  |
|        |                         | Tube            | yes           | 6-179230-1 | 6-179230-2 | 6-179230-3 | 6-179230-4 | 6-179230-5 | 6-179230-6 | 6-179230-8 | 6-179230-9 | 7-179230-0  |
|        | 100                     | Tape and Reel   | yes           | 3-177986-1 | 3-177986-2 | 3-177986-3 | 3-177986-4 | 3-177986-5 | 3-177986-6 | 3-177986-8 | 3-177986-9 |             |
|        | 30u"                    | Tube            | no            | 1123002-1  | 1123002-2  | 1123002-3  | 1123002-4  | 1123002-5  | 1123002-6  | 1123002-8  | 1123002-9  | 1-1123002-0 |
|        |                         | Tube            | yes           |            |            |            |            |            |            |            |            |             |
|        |                         | Tape and Reel   | yes           | 1123001-1  | 1123001-2  | 1123001-3  | 1123001-4  | 1123001-5  | 1123001-6  | 1123001-8  | 1123001-9  |             |
| R/A    | 8u"                     | Tube            | no            |            | 316229-3   | 316229-2   |            |            |            |            |            |             |

Stack Height = ((Rcpt Height + Plug Height) - 5)

example: ((13 H Rcpt + 6 H Plug) - 5) = ((13 + 6) - 5) = 14 mm stack height



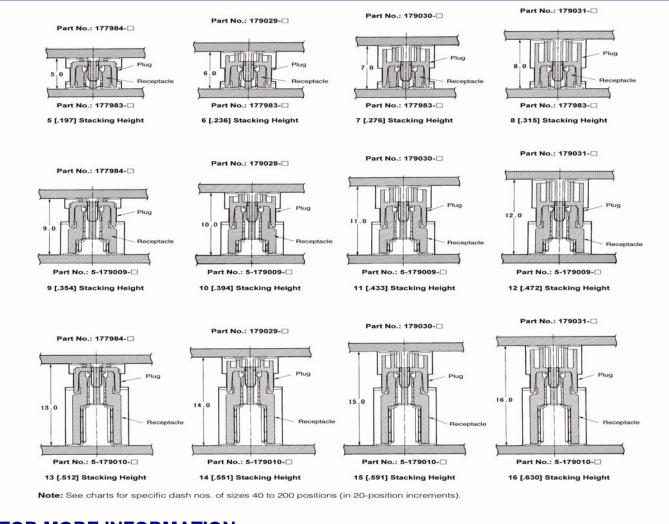
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|-----------|------------|-------|-------|--|--|
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| 40        | .598       | .858  | .795  |  |  |
| 60        | 23.20      | 29.80 | 28.20 |  |  |
| 00        | .913       | 1.173 | 1.110 |  |  |
| 80        | 31.20      | 37.80 | 36.20 |  |  |
| 00        | 1.228      | 1.488 | 1.425 |  |  |
| 100       | 39.20      | 45.80 | 44.20 |  |  |
| 100       | 1.543      | 1.803 | 1.740 |  |  |
| 120       | 47.20      | 53.80 | 52.20 |  |  |
| 120       | 1.858      | 2.118 | 2.055 |  |  |
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| 140       | 2.173      | 2.433 | 2.370 |  |  |
| 160       | 63.20      | 69.80 | 68.20 |  |  |
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| 180       | 71.20      | 77.80 | 76.20 |  |  |
| 100       | 2.803      | 3.063 | 3.000 |  |  |
| 200       | 79.20      | 85.80 | 84.20 |  |  |
| 200       | 3.118      | 3.378 | 3.315 |  |  |

| Height<br>Dim D | 5H   | 6H   | 7H   | 8H   |
|-----------------|------|------|------|------|
| Dim D           | 4.60 | 5.60 | 6.60 | 7.60 |
| ט ווווט         | .181 | .220 | .260 | .300 |
|                 |      |      |      |      |

# .8mm Free Height (FH) **Connector System**

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## **BOARD-TO-BOARD STACKING HEIGHTS (By Plug/Receptacle Combinations)**



#### FOR MORE INFORMATION

Product Specification: 108-5390

**Technical Support** 

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