

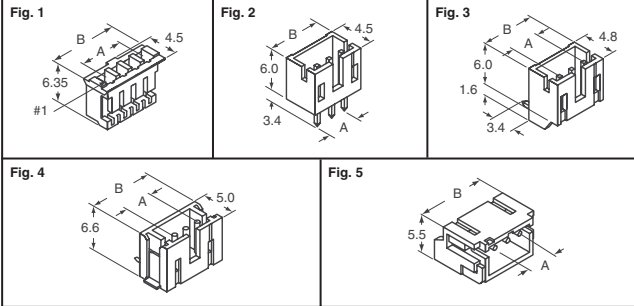
# JST PH Series 2.0mm Connectors



**Features:**  
 • Contact has long dimples near the center to ensure a good connection at all times • Square post is copper undercoated and tin/lead-plated for superior solderability and for whisker prevention • This connector is also available in a surface mount configuration. Its housing is made of heat resistant resin so that it is not adversely affected during reflow soldering.

**Specifications:**  
 • Current Rating: 2A AC/DC • Voltage Rating: 100V AC/DC • Temperature Range: -25°C - 85°C • Applicable Wire: 32 - 24 AWG • Color: Natural (White)

A



| Fig.                      | Cir-<br>cuts | Dimensions<br>(mm)<br>A B | Digi-Key<br>Part No. | Cut Tape<br>Pricing<br>10 100 500 | T & R*<br>Pricing<br>1,000 | JST<br>Part No. |
|---------------------------|--------------|---------------------------|----------------------|-----------------------------------|----------------------------|-----------------|
| <b>Receptacle Housing</b> |              |                           |                      |                                   |                            |                 |
| 1                         | 2            | 2.0 5.8                   | 455-1165-ND          | .33 2.76 11.03                    | —                          | PHR-2           |
|                           | 3            | 4.0 7.8                   | 455-1126-ND          | .34 2.82 11.30                    | —                          | PHR-3           |
|                           | 4            | 6.0 9.8                   | 455-1164-ND          | .41 3.43 13.72                    | —                          | PHR-4           |
|                           | 5            | 8.0 11.8                  | 455-1163-ND          | .43 3.56 14.26                    | —                          | PHR-5           |
|                           | 6            | 10.0 13.8                 | 455-1162-ND          | .46 3.90 15.59                    | —                          | PHR-6           |
|                           | 7            | 12.0 15.8                 | 455-1161-ND          | .60 4.97 19.90                    | —                          | PHR-7           |
|                           | 8            | 14.0 17.8                 | 455-1189-ND          | .62 5.18 20.71                    | —                          | PHR-8           |
|                           | 9            | 16.0 19.8                 | 455-1159-ND          | .63 5.25 20.98                    | —                          | PHR-9           |
|                           | 10           | 18.0 21.8                 | 455-1151-ND          | .68 5.65 22.59                    | —                          | PHR-10          |
|                           | 11           | 20.0 23.8                 | 455-1157-ND          | 1.21 10.08 40.34                  | —                          | PHR-11          |
|                           | 12           | 22.0 25.8                 | 455-1156-ND          | 1.31 10.96 43.84                  | —                          | PHR-12          |
|                           | 13           | 24.0 27.8                 | 455-1155-ND          | 1.39 11.63 46.53                  | —                          | PHR-13          |
|                           | 14           | 26.0 29.8                 | 455-1154-ND          | 1.55 12.97 51.90                  | —                          | PHR-14          |
|                           | 15           | 28.0 31.8                 | 455-1153-ND          | 1.61 13.45 53.79                  | —                          | PHR-15          |
|                           | 16           | 30.0 33.8                 | 455-1152-ND          | 2.16 17.95 71.81                  | —                          | PHR-16          |

| <b>Headers</b>                        |    |           |             |                   |   |                     |
|---------------------------------------|----|-----------|-------------|-------------------|---|---------------------|
| <b>Top Entry Thru-hole (Shrouded)</b> |    |           |             |                   |   |                     |
| 2                                     | 2  | 2.0 5.9   | 455-1704-ND | .65 5.44 21.74    | — | B2B-PH-K-S(LF)(SN)  |
|                                       | 3  | 4.0 7.9   | 455-1705-ND | .91 7.64 30.55    | — | B3B-PH-K-S(LF)(SN)  |
|                                       | 4  | 6.0 9.9   | 455-1706-ND | 1.14 9.53 38.09   | — | B4B-PH-K-S(LF)(SN)  |
|                                       | 5  | 8.0 11.9  | 455-1707-ND | 1.48 12.32 49.27  | — | B5B-PH-K-S(LF)(SN)  |
|                                       | 6  | 10.0 13.9 | 455-1708-ND | 1.69 14.09 56.37  | — | B6B-PH-K-S(LF)(SN)  |
|                                       | 7  | 12.0 15.9 | 455-1709-ND | 2.00 16.62 66.48  | — | B7B-PH-K-S(LF)(SN)  |
|                                       | 8  | 14.0 17.9 | 455-1710-ND | 2.18 18.18 72.72  | — | B8B-PH-K-S(LF)(SN)  |
|                                       | 9  | 16.0 19.9 | 455-1711-ND | 2.47 20.55 82.18  | — | B9B-PH-K-S(LF)(SN)  |
|                                       | 10 | 18.0 21.9 | 455-1712-ND | 2.69 22.43 89.71  | — | B10B-PH-K-S(LF)(SN) |
|                                       | 11 | 20.0 23.9 | 455-1713-ND | 2.90 24.20 96.82  | — | B11B-PH-K-S(LF)(SN) |
|                                       | 12 | 22.0 25.9 | 455-1714-ND | 3.13 26.09 104.35 | — | B12B-PH-K-S(LF)(SN) |
|                                       | 13 | 24.0 27.9 | 455-1715-ND | 3.46 28.78 115.11 | — | B13B-PH-K-S(LF)(SN) |
|                                       | 14 | 26.0 29.9 | 455-1716-ND | 3.72 31.04 124.15 | — | B14B-PH-K-S(LF)(SN) |
|                                       | 15 | 28.0 31.9 | 455-1717-ND | 3.97 33.08 132.32 | — | B15B-PH-K-S(LF)(SN) |
|                                       | 16 | 30.0 33.9 | 455-1718-ND | 4.51 37.60 150.38 | — | B16B-PH-K-S(LF)(SN) |

| <b>Side Entry Thru-hole (Shrouded)</b> |    |           |             |                   |   |                     |
|--|----|-----------|-------------|-------------------|---|---------------------|
| 3                                      | 2  | 2.0 5.9   | 455-1719-ND | .65 5.38 21.51    | — | S2B-PH-K-S(LF)(SN)  |
|  | 3  | 4.0 7.9   | 455-1720-ND | .85 7.10 28.39    | — | S3B-PH-K-S(LF)(SN)  |
|  | 4  | 6.0 9.9   | 455-1721-ND | 1.05 8.72 34.86   | — | S4B-PH-K-S(LF)(SN)  |
|  | 5  | 8.0 11.9  | 455-1722-ND | 1.29 10.70 42.81  | — | S5B-PH-K-S(LF)(SN)  |
|  | 6  | 10.0 13.9 | 455-1723-ND | 1.54 12.80 51.20  | — | S6B-PH-K-S(LF)(SN)  |
|  | 7  | 12.0 15.9 | 455-1724-ND | 1.71 14.25 57.01  | — | S7B-PH-K-S(LF)(SN)  |
|  | 8  | 14.0 17.9 | 455-1725-ND | 2.00 16.68 66.70  | — | S8B-PH-K-S(LF)(SN)  |
|  | 9  | 16.0 19.9 | 455-1726-ND | 2.23 18.56 74.23  | — | S9B-PH-K-S(LF)(SN)  |
|  | 10 | 18.0 21.9 | 455-1727-ND | 2.48 20.65 82.62  | — | S10B-PH-K-S(LF)(SN) |
|  | 11 | 20.0 23.9 | 455-1728-ND | 2.68 22.32 89.29  | — | S11B-PH-K-S(LF)(SN) |
|  | 12 | 22.0 25.9 | 455-1729-ND | 3.07 25.61 102.42 | — | S12B-PH-K-S(LF)(SN) |
|  | 13 | 24.0 27.9 | 455-1730-ND | 3.27 27.24 108.96 | — | S13B-PH-K-S(LF)(SN) |
|  | 14 | 26.0 29.9 | 455-1731-ND | 3.43 28.56 114.24 | — | S14B-PH-K-S(LF)(SN) |
|  | 15 | 28.0 31.9 | 455-1732-ND | 3.64 30.31 121.23 | — | S15B-PH-K-S(LF)(SN) |
|  | 16 | 30.0 33.9 | 455-1733-ND | 4.51 37.54 150.17 | — | S16B-PH-K-S(LF)(SN) |

| <b>Top Entry SMT (Shrouded)</b> |   |            |               |                   |        |                       |
|---------------------------------|---|------------|---------------|-------------------|--------|-----------------------|
| 4                               | 2 | 2.0 7.95   | 455-1734-1-ND | 2.98 24.80 99.19  | 164.66 | B2B-PH-SM4-TB(LF)(SN) |
|                                 | 3 | 4.0 9.95   | 455-1735-1-ND | 3.40 28.35 113.39 | 188.22 | B3B-PH-SM4-TB(LF)(SN) |
|                                 | 4 | 6.0 11.95  | 455-1736-1-ND | 4.29 35.77 143.07 | 237.50 | B4B-PH-SM4-TB(LF)(SN) |
|                                 | 5 | 8.0 13.95  | 455-1737-1-ND | 4.63 38.62 154.48 | 256.43 | B5B-PH-SM4-TB(LF)(SN) |
|                                 | 6 | 10.0 15.95 | 455-1738-1-ND | 5.03 41.90 167.60 | 278.22 | B6B-PH-SM4-TB(LF)(SN) |
|                                 | 7 | 12.0 17.95 | 455-1739-1-ND | 5.57 46.42 185.67 | 308.22 | B7B-PH-SM4-TB(LF)(SN) |
|                                 | 8 | 14.0 19.95 | 455-1740-1-ND | 5.95 49.54 198.15 | 328.94 | B8B-PH-SM4-TB(LF)(SN) |
|                                 | 9 | 16.0 21.95 | 455-1741-1-ND | 6.38 53.19 212.78 | 353.22 | B9B-PH-SM4-TB(LF)(SN) |

| Fig. | Cir-<br>cuts | Dimensions<br>(mm)<br>A B | Digi-Key<br>Part No. | Cut Tape<br>Pricing<br>10 100 500 | T & R*<br>Pricing<br>1,000 | JST<br>Part No.        |
|------|--------------|---------------------------|----------------------|-----------------------------------|----------------------------|------------------------|
| 4    | 10           | 18.0 23.95                | 455-1742-1-ND        | 7.59 63.26 253.03                 | 420.02                     | B10B-PH-SM4-TB(LF)(SN) |
|      | 11           | 20.0 25.95                | 455-1743-1-ND        | 8.07 67.29 269.15                 | 446.79                     | B11B-PH-SM4-TB(LF)(SN) |
|      | 12           | 22.0 27.95                | 455-1744-1-ND        | 8.44 70.30 281.20                 | 466.80                     | B12B-PH-SM4-TB(LF)(SN) |
|      | 13           | 24.0 29.95                | 455-1745-1-ND        | 8.70 72.56 290.24                 | 481.80                     | B13B-PH-SM4-TB(LF)(SN) |
|      | 14           | 26.0 31.95                | 455-1746-1-ND        | 8.98 74.82 299.28                 | 496.80                     | B14B-PH-SM4-TB(LF)(SN) |
|      | 15           | 28.0 33.95                | 455-1747-1-ND        | 9.25 77.08 308.31                 | 511.79                     | B15B-PH-SM4-TB(LF)(SN) |
| 16   | 30.0 35.95   | 455-1748-1-ND             | 9.52 79.34 317.35    | 526.80                            | B16B-PH-SM4-TB(LF)(SN)     |                        |

| <b>Side Entry SMT (Shrouded)</b> |    |           |               |                   |        |                        |
|----------------------------------|----|-----------|---------------|-------------------|--------|------------------------|
| 5                                | 2  | 2.0 7.9   | 455-1749-1-ND | 3.13 26.09 104.35 | 173.22 | S2B-PH-SM4-TB(LF)(SN)  |
|                                  | 3  | 4.0 9.9   | 455-1750-1-ND | 3.68 30.66 122.64 | 203.58 | S3B-PH-SM4-TB(LF)(SN)  |
|                                  | 4  | 6.0 11.9  | 455-1751-1-ND | 4.25 35.39 141.57 | 235.01 | S4B-PH-SM4-TB(LF)(SN)  |
|                                  | 5  | 8.0 13.9  | 455-1752-1-ND | 4.44 37.00 148.02 | 245.72 | S5B-PH-SM4-TB(LF)(SN)  |
|                                  | 6  | 10.0 15.9 | 455-1753-1-ND | 5.31 44.21 176.85 | 293.58 | S6B-PH-SM4-TB(LF)(SN)  |
|                                  | 7  | 12.0 17.9 | 455-1754-1-ND | 5.37 44.75 179.00 | 297.14 | S7B-PH-SM4-TB(LF)(SN)  |
|                                  | 8  | 14.0 19.9 | 455-1755-1-ND | 5.76 47.98 191.92 | 318.58 | S8B-PH-SM4-TB(LF)(SN)  |
|                                  | 9  | 16.0 21.9 | 455-1756-1-ND | 6.00 54.97 219.88 | 365.00 | S9B-PH-SM4-TB(LF)(SN)  |
|                                  | 10 | 18.0 23.9 | 455-1757-1-ND | 7.61 63.42 253.67 | 421.09 | S10B-PH-SM4-TB(LF)(SN) |
|                                  | 12 | 22.0 27.9 | 455-1758-1-ND | 8.34 69.49 277.97 | 461.43 | S12B-PH-SM4-TB(LF)(SN) |
|                                  | 13 | 24.0 29.9 | 455-1759-1-ND | 8.71 72.61 290.45 | 482.15 | S13B-PH-SM4-TB(LF)(SN) |
|                                  | 14 | 26.0 31.9 | 455-1760-1-ND | 8.93 74.39 297.56 | 493.95 | S14B-PH-SM4-TB(LF)(SN) |
|                                  | 15 | 28.0 33.9 | 455-1761-1-ND | 9.14 76.16 304.65 | 505.72 | S15B-PH-SM4-TB(LF)(SN) |

\* For Tape and Reel part number, change 1-ND to 2-ND.

| Description                | Digi-Key<br>Part No. | Cut Tape Pricing<br>1 100 500 | Tape and Reel*<br>Qty. Pricing | JST<br>Part No. |
|----------------------------|----------------------|-------------------------------|--------------------------------|-----------------|
| <b>Contacts-Tin Plated</b> |                      |                               |                                |                 |
| 30 - 24 AWG                | 455-1127-1-ND        | — 1.61 6.45                   | 8,000 9.67M                    | SPH-002T-P0.5S  |
| 32 - 28 AWG                | 455-1318-1-ND        | — 1.55 6.19                   | 10,000 8.24M                   | SPH-004T-P0.5S  |
| <b>Crimp Tools</b>         |                      |                               |                                |                 |
| 30 - 24 AWG                | 455-1128-ND          | 319.55                        | —                              | WC-240          |
| 32 - 28 AWG                | 455-1236-ND          | 633.99                        | —                              | YRS-243         |

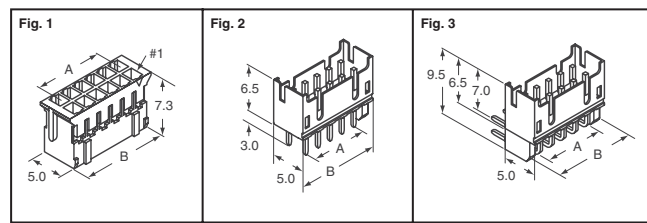
\* For Tape and Reel part number, change 1-ND to 2-ND.

## PHD Series 2.0mm Connectors



**Features:** • This compact design meets the demand for high-density connection • The box contact supplies stable contact performance

**Specifications:** • Current Rating: 3A AC/DC • Voltage Rating: 250V AC/DC • Temperature Range: -25°C - 85°C • Applicable Wire: 28 - 22 AWG



| Fig.                                  | Cir-<br>cuts | Dimensions - mm<br>A B | Digi-Key<br>Part No. | Pricing<br>10 100 500 | JST<br>Part No. |
|---------------------------------------|--------------|------------------------|----------------------|-----------------------|-----------------|
| <b>Housing — Color: Natural White</b> |              |                        |                      |                       |                 |
| 1                                     | 8            | 6.0 9.9                | 455-2265-ND          | 1.65 13.76 55.05      | PHDR-08VS       |
|                                       | 10           | 8.0 11.9               | 455-1158-ND          | 1.71 14.30 57.19      | PHDR-10VS       |
|                                       | 12           | 10.0 13.9              | 455-1204-ND          | 1.75 14.57 58.27      | PHDR-12VS       |
|                                       | 14           | 12.0 15.9              | 455-1172-ND          | 1.77 14.75 58.99      | PHDR-14VS       |
|                                       | 16           | 14.0 17.9              | 455-1173-ND          | 1.89 15.78 63.11      | PHDR-16VS       |
|                                       | 18           | 16.0 19.9              | 455-1905-ND          | 1.92 15.96 63.83      | PHDR-18VS       |
|                                       | 20           | 18.0 21.9              | 455-1174-ND          | 1.94 16.14 64.54      | PHDR-20VS       |
|                                       | 22           | 20.0 23.9              | 455-1175-ND          | 3.35 27.97 111.88     | PHDR-22VS       |
|                                       | 24           | 22.0 25.9              | 455-1177-ND          | 3.38 28.20 112.78     | PHDR-24VS       |
|                                       | 26           | 24.0 27.9              | 455-1178-ND          | 3.42 28.51 114.03     | PHDR-26VS       |
|                                       | 28           | 26.0 29.9              | 455-1171-ND          | 3.45 28.74 114.93     | PHDR-28VS       |
|                                       | 30           | 28.0 31.9              | 455-1180-ND          | 3.49 29.09 116.36     | PHDR-30VS       |
|                                       | 32           | 30.0 33.9              | 455-1179-ND          | 3.52 29.36 117.44     | PHDR-32VS       |
|                                       | 34           | 32.0 35.9              | 455-1182-ND          | 3.56 29.63 118.50     | PHDR-34VS       |

| <b>Headers — Color: Natural Ivory</b> |    |           |             |                   |                   |
|---------------------------------------|----|-----------|-------------|-------------------|-------------------|
| <b>Top Entry (Shrouded)</b>           |    |           |             |                   |                   |
| 2                                     | 8  | 6.0 9.9   | 455-2230-ND | 2.24 18.66 74.64  | B8B-PHDS(LF)(SN)  |
|                                       | 10 | 8.0 11.9  | 455-1762-ND | 2.42 20.15 80.62  | B10B-PHDS(LF)(SN) |
|                                       | 12 | 10.0 13.9 | 455-1763-ND | 2.82 23.54 94.18  | B12B-PHDS(LF)(SN) |
|                                       | 14 | 12.0 15.9 | 455-1764-ND | 3.35 27.89 111.56 | B14B-PHDS(LF)(SN) |
|                                       | 16 | 14.0 17.9 | 455-1765-ND | 3.62 30.11 120.44 | B16B-PHDS(LF)(SN) |
|                                       | 18 | 16.0 19.9 | 455-1766-ND | 3.80 31.66 126.63 | B18B-PHDS(LF)(SN) |
|                                       | 20 | 18.0 21.9 | 455-1767-ND | 4.12 34.39 137.55 | B20B-PHDS(LF)(SN) |
|                                       | 22 | 20.0 23.9 | 455-1768-ND | 5.26 43.82 175.29 | B22B-PHDS(LF)(SN) |
|                                       | 24 | 22.0 25.9 | 455-1769-ND | 5.71 47.55 190.18 | B24B-PHDS(LF)(SN) |
|                                       | 26 | 24.0 27.9 | 455-1770-ND | 5.95 49.53 198.14 | B26B-PHDS(LF)(SN) |
|                                       | 28 | 26.0 29.9 | 455-1771-ND | 6.22 51.78 207.08 | B28B-PHDS(LF)(SN) |
|                                       | 30 | 28.0 31.9 | 455-1772-ND | 6.50 54.12 216.50 | B30B-PHDS(LF)(SN) |
|                                       | 32 | 30.0 33.9 | 455-1773-ND | 6.77 56.36 225.44 | B32B-PHDS(LF)(SN) |
|                                       | 34 | 32.0 35.9 | 455-1774-ND | 6.98 58.19 232.76 | B34B-PHDS(LF)(SN) |

(Continued)

# JST PHD Series 2.0mm Connectors (Cont.)



| Fig.                         | Cir-<br>cuts | Dimensions - mm |      | Digi-Key<br>Part No. | Pricing |       |        | JST<br>Part No.      |
|------------------------------|--------------|-----------------|------|----------------------|---------|-------|--------|----------------------|
|                              |              | A               | B    |                      | 10      | 100   | 500    |                      |
| <b>Side Entry (Shrouded)</b> |              |                 |      |                      |         |       |        |                      |
| 3                            | 8            | 6.0             | 9.9  | 455-2256-ND          | 2.22    | 18.52 | 74.09  | S8B-PHDSS(LF)(SN)(P) |
|                              | 10           | 8.0             | 11.9 | 455-1775-ND          | 2.64    | 21.98 | 87.90  | S10B-PHDSS(LF)(SN)   |
|                              | 12           | 10.0            | 13.9 | 455-1776-ND          | 3.09    | 25.74 | 102.95 | S12B-PHDSS(LF)(SN)   |
|                              | 14           | 12.0            | 15.9 | 455-1777-ND          | 3.65    | 30.46 | 121.82 | S14B-PHDSS(LF)(SN)   |
|                              | 16           | 14.0            | 17.9 | 455-1778-ND          | 3.78    | 31.49 | 125.96 | S16B-PHDSS(LF)(SN)   |
|                              | 18           | 16.0            | 19.9 | 455-1779-ND          | 4.19    | 34.88 | 139.54 | S18B-PHDSS(LF)(SN)   |
|                              | 20           | 18.0            | 21.9 | 455-1780-ND          | 4.56    | 37.99 | 151.95 | S20B-PHDSS(LF)(SN)   |
|                              | 22           | 20.0            | 23.9 | 455-1781-ND          | 5.73    | 47.76 | 191.02 | S22B-PHDSS(LF)(SN)   |
|                              | 24           | 22.0            | 25.9 | 455-1782-ND          | 6.22    | 51.85 | 207.40 | S24B-PHDSS(LF)(SN)   |
|                              | 26           | 24.0            | 27.9 | 455-1783-ND          | 6.51    | 54.29 | 217.17 | S26B-PHDSS(LF)(SN)   |
|                              | 28           | 26.0            | 29.9 | 455-1784-ND          | 6.72    | 56.03 | 224.12 | S28B-PHDSS(LF)(SN)   |
|                              | 30           | 28.0            | 31.9 | 455-1785-ND          | 7.13    | 59.39 | 237.53 | S30B-PHDSS(LF)(SN)   |
|                              | 32           | 30.0            | 33.9 | 455-1786-ND          | 7.43    | 61.91 | 247.62 | S32B-PHDSS(LF)(SN)   |
|                              | 34           | 32.0            | 35.9 | 455-1787-ND          | 7.71    | 64.27 | 257.05 | S34B-PHDSS(LF)(SN)   |

| Description                | Digi-Key<br>Part No. | Cut Tape<br>Pricing |      | Tape & Reel<br>Pricing* | JST<br>Part No. |
|----------------------------|----------------------|---------------------|------|-------------------------|-----------------|
|                            |                      | 100                 | 500  |                         |                 |
| <b>Contacts-Tin Plated</b> |                      |                     |      |                         |                 |
| 26 - 22 AWG                | 455-1325-1-ND        | 1.68                | 6.72 | 10.09/M                 | SPHD-001T-P0.5  |
| 28 - 24 AWG                | 455-1313-1-ND        | 1.68                | 6.72 | 10.09/M                 | SPHD-002T-P0.5  |
| <b>Crimp Tools</b>         |                      |                     |      |                         |                 |
| 26 - 22 AWG Contacts       | 455-1238-ND          | 319.55/1            | —    | —                       | WC-610          |
| 28 - 24 AWG Contacts       | 455-1237-ND          | 633.99/1            | —    | —                       | YRS-620         |

\* For Tape and Reel part number, change 1-ND to 2-ND.

## EH Series 2.5mm Connectors

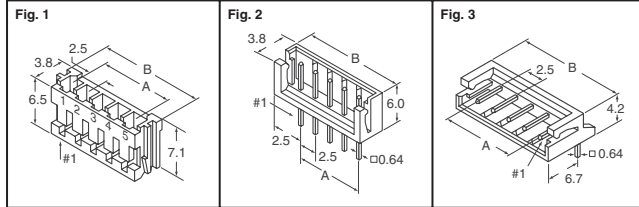


**Features:** • Compact and Slim: This connector is designed to be compact and unusually thin. It measures only 8.1mm (.319") high after mounting and is just 3.8mm (.150") wide. • Highly Reliable Contact: The contact has long dimples near the center that ensure continuity of low voltage and low current circuits at all times, even under conditions of vibration and abusive prying. • Polarizing Guides: The header and housing have guides to prevent improper mating. • Whisker Prevention: The contact material is treated with a reflow process, and the square post is copper-undercoated and tin/lead-plated for whisker prevention. • Easy and Effective Crimping: Although the contact is compact, it has a long wire strip length, 2.6 ± 0.4mm (.102" ± .016"). This long length is very useful for automatic crimping and when crimping shielded wires.

**Specifications:** • Current Rating: 3A AC/DC (22 AWG) • Voltage Rating: 250V AC/DC • Temperature Range: -25°C - 85°C • Applicable Wire: 32 - 22 AWG

**Material and Finish:** • Contact: Phosphor bronze, tin-plated • Housing: Nylon 66, UL94V-0, natural (white) • Posts for Headers: Brass, copper-undercoated, tin/lead plated • Wafer: Nylon 66, UL94V-0, natural (white)

**Applicable PC Board Thickness:** 0.8 - 1.6mm (.031" - .063")



| Fig.   | Cir-<br>cuts   | Dimensions - mm |      | Digi-Key<br>Part No. | Pricing |       |        | JST<br>Part No.   |
|--|--|-----------------|------|----------------------|---------|-------|--------|-------------------|
|  |  | A               | B    |                      | 10      | 100   | 500    |                   |
| <b>Disconnectable Crimp Style Female Receptacle Housing — RoHS Compliant</b> |  |                 |      |                      |         |       |        |                   |
| 1  | 2  | 2.5             | 7.0  | 455-1000-ND          | .30     | 2.53  | 10.11  | EHR-2             |
|  | 3  | 5.0             | 9.5  | 455-1001-ND          | .33     | 2.80  | 11.19  | EHR-3             |
|  | 4  | 7.5             | 12.0 | 455-1002-ND          | .34     | 2.85  | 11.41  | EHR-4             |
|  | 5  | 10.0            | 14.5 | 455-1003-ND          | .38     | 3.17  | 12.69  | EHR-5             |
|  | 6  | 12.5            | 17.0 | 455-1004-ND          | .41     | 3.44  | 13.76  | EHR-6             |
|  | 7  | 15.0            | 19.5 | 455-1005-ND          | .48     | 3.98  | 15.91  | EHR-7             |
|  | 8  | 17.5            | 22.0 | 455-1006-ND          | .49     | 4.15  | 16.57  | EHR-8             |
|  | 9  | 20.0            | 24.5 | 455-1007-ND          | .71     | 5.92  | 23.67  | EHR-9             |
|  | 10   | 22.5            | 27.0 | 455-1008-ND          | .75     | 6.24  | 24.96  | EHR-10            |
|  | 11   | 25.0            | 29.5 | 455-1009-ND          | .93     | 7.75  | 30.99  | EHR-11            |
|  | 12   | 27.5            | 32.0 | 455-1010-ND          | 1.13    | 9.36  | 37.44  | EHR-12            |
|  | 13   | 30.0            | 34.5 | 455-1011-ND          | 1.19    | 9.90  | 39.59  | EHR-13            |
|  | 14   | 32.5            | 37.0 | 455-1012-ND          | 1.51    | 12.59 | 50.35  | EHR-14            |
|  | 15   | 35.0            | 39.5 | 455-1013-ND          | 1.55    | 12.97 | 51.85  | EHR-15            |
|  | <b>Top Entry Shrouded Board-Mount Headers (Use with EH and HR Series Female Housing - Not TUV approved) — RoHS Compliant</b> |                 |      |                      |         |       |        |                   |
| 2  | 2  | 2.5             | 7.5  | 455-1611-ND          | .53     | 4.39  | 17.57  | B2B-EH-A(LF)(SN)  |
|  | 3  | 5.0             | 10.0 | 455-1612-ND          | .72     | 5.96  | 23.84  | B3B-EH-A(LF)(SN)  |
|  | 4  | 7.5             | 12.5 | 455-1613-ND          | .94     | 7.85  | 31.38  | B4B-EH-A(LF)(SN)  |
|  | 5  | 10.0            | 15.0 | 455-1614-ND          | 1.13    | 9.37  | 37.48  | B5B-EH-A(LF)(SN)  |
|  | 6  | 12.5            | 17.5 | 455-1615-ND          | 1.35    | 11.25 | 45.00  | B6B-EH-A(LF)(SN)  |
|  | 7  | 15.0            | 20.0 | 455-1616-ND          | 1.53    | 12.78 | 51.10  | B7B-EH-A(LF)(SN)  |
|  | 8  | 17.5            | 22.5 | 455-1617-ND          | 1.74    | 14.48 | 57.91  | B8B-EH-A(LF)(SN)  |
|  | 9  | 20.0            | 25.0 | 455-1618-ND          | 1.93    | 16.10 | 64.37  | B9B-EH-A(LF)(SN)  |
|  | 10   | 22.5            | 27.5 | 455-1619-ND          | 2.25    | 18.74 | 74.94  | B10B-EH-A(LF)(SN) |
|  | 11   | 25.0            | 30.0 | 455-1620-ND          | 2.48    | 20.66 | 82.65  | B11B-EH-A(LF)(SN) |
|  | 12   | 27.5            | 32.5 | 455-1621-ND          | 2.58    | 21.52 | 86.07  | B12B-EH-A(LF)(SN) |
|  | 13   | 30.0            | 35.0 | 455-1622-ND          | 3.06    | 25.50 | 102.02 | B13B-EH-A(LF)(SN) |
|  | 14   | 32.5            | 37.5 | 455-1623-ND          | 3.31    | 27.61 | 110.44 | B14B-EH-A(LF)(SN) |
|  | 15   | 35.0            | 40.0 | 455-1624-ND          | 3.50    | 29.13 | 116.54 | B15B-EH-A(LF)(SN) |

| Fig.   | Cir-<br>cuts | Dimensions - mm |      | Digi-Key<br>Part No. | Pricing |       |        | JST<br>Part No. |
|--|--------------|-----------------|------|----------------------|---------|-------|--------|-----------------|
|  |              | A               | B    |                      | 10      | 100   | 500    |                 |
| <b>Side Entry Shrouded Board-Mount Headers (Use with EH and HR Series Female Housing)</b>                  |              |                 |      |                      |         |       |        |                 |
| 3  | 7            | 15.0            | 20.0 | 455-1033-ND          | 1.64    | 13.66 | 54.64  | S7B-EH          |
| <b>Side Entry Shrouded Board-Mount Headers (Use with EH and HR Series Female Housing) — RoHS Compliant</b> |              |                 |      |                      |         |       |        |                 |
| 3  | 2            | 2.5             | 7.5  | 455-1625-ND          | .63     | 5.25  | 20.98  | S2B-EH(LF)(SN)  |
|  | 3            | 5.0             | 10.0 | 455-1626-ND          | .76     | 6.28  | 25.11  | S3B-EH(LF)(SN)  |
|  | 4            | 7.5             | 12.5 | 455-1627-ND          | .89     | 7.44  | 29.76  | S4B-EH(LF)(SN)  |
|  | 5            | 10.0            | 15.0 | 455-1628-ND          | 1.17    | 9.73  | 38.91  | S5B-EH(LF)(SN)  |
|  | 6            | 12.5            | 17.5 | 455-1629-ND          | 1.45    | 12.10 | 48.41  | S6B-EH(LF)(SN)  |
|  | 7            | 15.0            | 20.0 | 455-1630-ND          | 1.72    | 14.35 | 57.37  | S7B-EH(LF)(SN)  |
|  | 8            | 17.5            | 22.5 | 455-1631-ND          | 2.02    | 16.81 | 67.23  | S8B-EH(LF)(SN)  |
|  | 9            | 20.0            | 25.0 | 455-1632-ND          | 2.15    | 17.93 | 71.71  | S9B-EH(LF)(SN)  |
|  | 10           | 22.5            | 27.5 | 455-1633-ND          | 2.65    | 22.10 | 88.39  | S10B-EH(LF)(SN) |
|  | 11           | 25.0            | 30.0 | 455-1634-ND          | 2.94    | 24.47 | 97.89  | S11B-EH(LF)(SN) |
|  | 12           | 27.5            | 32.5 | 455-1635-ND          | 3.11    | 25.91 | 103.63 | S12B-EH(LF)(SN) |
|  | 13           | 30.0            | 35.0 | 455-1636-ND          | 3.84    | 31.96 | 127.85 | S13B-EH(LF)(SN) |
|  | 14           | 32.5            | 37.5 | 455-1637-ND          | 4.08    | 33.98 | 135.90 | S14B-EH(LF)(SN) |
|  | 15           | 35.0            | 40.0 | 455-1638-ND          | 4.39    | 36.58 | 146.30 | S15B-EH(LF)(SN) |

| Description                     | Digi-Key<br>Part No. | Cut Tape Pricing |      | T&R Pricing* | JST<br>Part No. |
|---------------------------------|----------------------|------------------|------|--------------|-----------------|
|                                 |                      | 100              | 500  |              |                 |
| <b>Contact — RoHS Compliant</b> |                      |                  |      |              |                 |
| 30 - 22 AWG                     | 455-1042-1-ND        | 1.48             | 5.92 | 8.88/M       | SEH-001T-P0.6   |
| <b>Crimp Tool</b>               |                      |                  |      |              |                 |
| 30 - 22 AWG Contacts            | 455-1043-ND          | 329.71/1         | —    | —            | WC-260          |

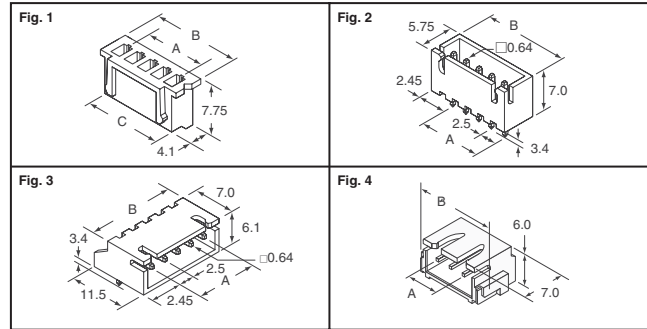
\* For Tape and Reel part number, change 1-ND to 2-ND.

## XH Series 2.5mm Connectors



The XH connector was developed based on the high reliability and versatility of the NH series connectors. The connector is very small with a mounting height of 9.8mm (.386").

**Specifications:** • Current Rating: 3A AC/DC (AWG #22) • Voltage Rating: 250V AC/DC • Temperature Range: -25°C - 85°C • Applicable Wire: 30 to 22 AWG • Applicable PC Board Thickness: 1.6mm (.063")



| Fig.                        | Circuits                              | Dimension - mm |      |      | Digi-Key<br>Part No. | Pricing |       |        | JST<br>Part No.   |
|-----------------------------|---------------------------------------|----------------|------|------|----------------------|---------|-------|--------|-------------------|
|                             |                                       | A              | B    | C    |                      | 10      | 100   | 500    |                   |
| <b>Housing</b>              |                                       |                |      |      |                      |         |       |        |                   |
| 1                           | 1                                     | —              | 3.2  | 4.8  | 455-2220-ND          | 1.42    | 11.84 | 47.37  | XHP-1             |
|                             | 2                                     | 2.5            | 5.7  | 7.3  | 455-2226-ND          | .37     | 3.09  | 12.37  | XHP-2             |
|                             | 3                                     | 5.0            | 8.2  | 9.8  | 455-2219-ND          | .41     | 3.43  | 13.72  | XHP-3             |
|                             | 4                                     | 7.5            | 10.7 | 12.3 | 455-2267-ND          | .41     | 3.43  | 13.72  | XHP-4             |
|                             | 5                                     | 10.0           | 13.2 | 14.8 | 455-2268-ND          | .46     | 3.83  | 15.33  | XHP-5             |
|                             | 6                                     | 12.5           | 15.7 | 17.3 | 455-2218-ND          | .54     | 4.51  | 18.02  | XHP-6             |
|                             | 7                                     | 15.0           | 18.2 | 19.8 | 455-2269-ND          | .57     | 4.71  | 18.83  | XHP-7             |
|                             | 9                                     | 20.0           | 23.2 | 24.8 | 455-2217-ND          | .87     | 7.26  | 29.05  | XHP-9             |
|                             | 10                                    | 22.5           | 25.7 | 27.3 | 455-2210-ND          | .88     | 7.33  | 29.31  | XHP-10            |
|                             | 11                                    | 25.0           | 28.2 | 29.8 | 455-2216-ND          | 1.15    | 9.55  | 38.19  | XHP-11            |
|                             | 12                                    | 27.5           | 30.7 | 32.3 | 455-2215-ND          | 1.21    | 10.08 | 40.34  | XHP-12            |
|                             | 13                                    | 30.0           | 33.2 | 34.8 | 455-2214-ND          | 1.39    | 11.57 | 46.25  | XHP-13            |
|                             | 14                                    | 32.5           | 35.7 | 37.3 | 455-2213-ND          | 1.79    | 14.93 | 59.71  | XHP-14            |
|                             | 15                                    | 35.0           | 38.2 | 39.8 | 455-2212-ND          | 1.83    | 15.26 | 61.04  | XHP-15            |
|                             | 16                                    | 37.5           | 40.7 | 42.3 | 455-2209-ND          | 3.17    | 26.43 | 105.69 | XHP-16            |
|                             | 20                                    | 47.5           | 50.7 | 52.3 | 455-2211-ND          | 4.34    | 36.18 | 144.69 | XHP-20            |
| <b>Headers</b>              |                                       |                |      |      |                      |         |       |        |                   |
| <b>Top Entry (Shrouded)</b> |                                       |                |      |      |                      |         |       |        |                   |
| 2                           | 2                                     | 2.5            | 7.4  | —    | 455-2247-ND          | .57     | 4.71  | 18.83  | B2B-XH-A(LF)(SN)  |
|                             | 3                                     | 5.0            | 9.9  | —    | 455-2248-ND          | .73     | 6.05  | 24.20  | B3B-XH-A(LF)(SN)  |
|                             | 4                                     | 7.5            | 12.4 | —    | 455-2249-ND          | .98     | 8.16  | 32.63  | B4B-XH-A(LF)(SN)  |
|                             | 5                                     | 10.0           | 14.9 | —    | 455-2270-ND          | 1.19    | 9.95  | 39.81  | B5B-XH-A(LF)(SN)  |
|                             | 6                                     | 12.5           | 17.4 | —    | 455-2271-ND          | 1.39    | 11.61 | 46.44  | B6B-XH-A(LF)(SN)  |
|                             | 7                                     | 15.0           | 19.9 | —    | 455-2252-ND          | 1.66    | 13.85 | 55.40  | B7B-XH-A(LF)(SN)  |
|                             | 8                                     | 17.5           | 22.4 | —    | 455-2251-ND          | 1.84    | 15.33 | 61.32  | B8B-XH-A(LF)(SN)  |
|                             | 9                                     | 20.0           | 24.9 | —    | 455-2244-ND          | 2.06    | 17.17 | 68.67  | B9B-XH-A(LF)(SN)  |
|                             | 10                                    | 22.5           | 27.4 | —    | 455-2253-ND          | 2.40    | 19.99 | 79.97  | B10B-XH-A(LF)(SN) |
|                             | 11                                    | 25.0           | 29.9 | —    | 455-2255-ND          | 2.53    | 21.11 | 84.45  | B11B-XH-A(LF)(SN) |
|                             | 12                                    | 27.5           | 32.4 | —    | 455-2259-ND          | 2.93    | 24.39 | 97.54  | B12B-XH-A(LF)(SN) |
|                             | 13                                    | 30.0           | 34.9 | —    | 455-2260-ND          | 3.11    | 25.95 | 103.82 | B13B-XH-A(LF)(SN) |
|                             | 14                                    | 32.5           | 37.4 | —    | 455-2258-ND          | 3.37    | 28.06 | 112.23 | B14B-XH-A(LF)(SN) |
|                             | 15                                    | 35.0           | 39.9 | —    | 455-2254-ND          | 3.62    | 30.22 | 120.85 | B15B-XH-A(LF)(SN) |
|                             | 16                                    | 37.5           | 42.4 | —    | 455-2241-ND          | 3.83    | 31.91 | 127.65 | B16B-XH-A(LF)(SN) |
|                             | <b>Top Entry (Shrouded) With Boss</b> |                |      |      |                      |         |       |        |                   |
| 2                           | 1                                     | —              | 4.9  | —    | 455-2227-ND          | 1.26    | 10.46 | 41.83  | B1B-XH-AM(LF)(SN) |
|                             | 2                                     | 2.5            | 7.4  | —    | 455-2273-ND          | .63     | 5.25  | 20.98  | B2B-XH-AM(LF)(SN) |
|                             | 3                                     | 5.0            | 9.9  | —    | 455-2231-ND          | .81     | 6.72  | 26.89  | B3B-XH-AM(LF)(SN) |
|                             | 4                                     | 7.5            | 12.4 | —    | 455-2237-ND          | 1.05    | 8.74  | 34.96  | B4B-XH-AM(LF)(SN) |