

# molex 2mm Milli-Grid™ Connectors



**HEADERS: Electrical:** • Current: 2.0A • Dielectric Withstanding Voltage: 500V (Shrouded Vertical, SMT, and Right Angle: 1000V) • Insulation Resistance: 1000MΩ minimum **Physical:** • Housing: 4/6 nylon, UL 94V-0 (Right Angle: Black glass-filled polyester, UL 94V-0) • Contact: Phosphor Bronze • Plating: 15µ" Select Gold • Temperature: -55°C - 105°C

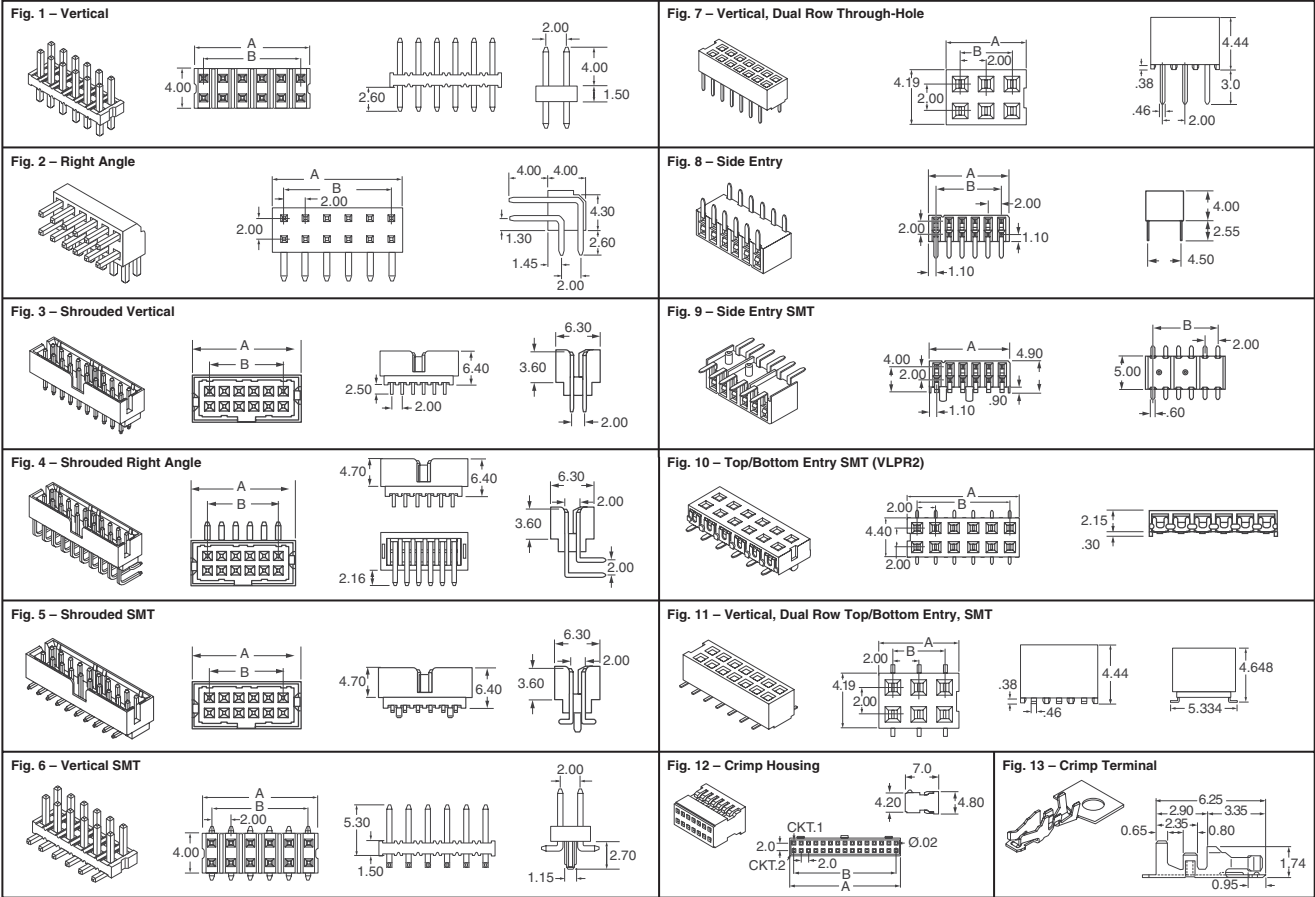
**RECEPTACLE: Electrical:** • Voltage: 125V • Current: 1.0A • Contact Resistance: 25mΩ maximum (Side Entry, Side Entry SMT, and Top/Bottom Entry: 15mΩ maximum) • Dielectric Withstanding Voltage: 500VAC (Top/Bottom Entry: 1000V) • Insulation Resistance: 1000MΩ minimum **Physical:** • Housing: Black glass-filled polyester, UL 94V-0 (Top/Bottom Entry:

Black LCP, UL 94V-0, Side Entry and Side Entry SMT: Black nylon, UL 94V-0) • Contact: Phosphor Bronze • Plating: 15µ" Select Gold • Temperature: -55°C - 105°C

**CRIMP TERMINAL: Electrical:** • Voltage: 125V • Current: 26AWG: 1.5A, 28AWG: 1.0A, and 30AWG: 0.5A • Contact Resistance: 40mΩ maximum **Physical:** • Contact: Phosphor Bronze • Plating: 15µ" Select Gold • Temperature: -40°C - 105°C • Wire Range: 24-30AWG • Insulation Range: 1.40mm diameter maximum

**CRIMP HOUSING: Physical:** • Housing: Black glass-filled polyester, UL 94V-0 • Temperature: -55°C - 105°C

A



| Fig.                       | Cir-<br>cuits | Dim. (mm)<br>A B | Digi-Key<br>Part No. | 1      | Pricing<br>10 | 100        | Molex<br>Part No. |
|----------------------------|---------------|------------------|----------------------|--------|---------------|------------|-------------------|
| <b>Vertical Headers</b>    |               |                  |                      |        |               |            |                   |
| 1                          | 4             | 3.90 2.00        | WM18833-ND           | 5.70   | 50.59         | 337.10     | 87758-0416        |
|                            | 6             | 5.90 4.00        | WM18834-ND           | 7.74   | 67.93         | 452.99     | 87758-0616        |
|                            | 8             | 7.90 6.00        | WM18835-ND           | 8.93   | 78.64         | 524.15     | 87758-0816        |
|                            | 10            | 9.90 8.00        | WM18836-ND           | 10.03  | 88.17         | 587.91     | 87758-1016        |
|                            | 12            | 11.90 10.00      | WM18837-ND           | 11.99  | 106.10        | 707.62     | 87758-1216        |
|                            | 14            | 13.90 12.00      | WM18838-ND           | 12.50  | 110.10        | 733.72     | 87758-1416        |
|                            | 16            | 15.90 14.00      | WM18839-ND           | 13.35  | 117.92        | 786.26     | 87758-1616-C      |
|                            | 18            | 17.90 16.00      | WM18840-ND           | 15.05  | 133.06        | 887.18     | 87758-1816        |
|                            | 20            | 19.90 18.00      | WM18841-ND           | 17.85  | 157.80        | 1052.12    | 87758-2016        |
|                            | 22            | 21.90 20.00      | WM18842-ND           | 19.64  | 173.53        | 1156.95    | 87758-2216        |
|                            | 24            | 23.90 22.00      | WM18843-ND           | 20.23  | 178.54        | 1190.54    | 87758-2416        |
|                            | 26            | 25.90 24.00      | WM18844-ND           | 23.21  | 204.47        | 1362.87    | 87758-2616        |
| 28                         | 27.90 26.00   | WM18845-ND       | 24.91                | 220.12 | 1467.70       | 87758-2816 |                   |
| 30                         | 29.90 28.00   | WM18846-ND       | 25.42                | 224.62 | 1497.46       | 87758-3016 |                   |
| 32                         | 31.90 30.00   | WM18847-ND       | 26.10                | 230.23 | 1535.04       | 87758-3216 |                   |
| 34                         | 33.90 32.00   | WM18848-ND       | 26.53                | 234.15 | 1561.22       | 87758-3416 |                   |
| 36                         | 35.90 34.00   | WM18849-ND       | 28.06                | 247.66 | 1651.34       | 87758-3616 |                   |
| 38                         | 37.90 36.00   | WM18850-ND       | —                    | —      | 1316.62       | 87758-3816 |                   |
| 40                         | 39.90 38.00   | WM18851-ND       | 31.20                | 275.21 | 1834.56       | 87758-4016 |                   |
| 42                         | 41.90 40.00   | WM18852-ND       | 32.82                | 289.24 | 1928.08       | 87758-4216 |                   |
| 44                         | 43.90 42.00   | WM18853-ND       | 34.26                | 302.67 | 2017.95       | 87758-4416 |                   |
| 46                         | 45.90 44.00   | WM18854-ND       | 35.88                | 316.70 | 2111.47       | 87758-4616 |                   |
| 48                         | 47.90 46.00   | WM18855-ND       | 37.41                | 330.22 | 2201.42       | 87758-4816 |                   |
| 50                         | 49.90 48.00   | WM18856-ND       | 35.03                | 308.88 | 2059.01       | 87758-5016 |                   |
| <b>Right Angle Headers</b> |               |                  |                      |        |               |            |                   |
| 2                          | 4             | 4.00 2.00        | WM18612-ND           | 6.46   | 57.05         | 380.04     | 87760-0416        |
|                            | 6             | 6.00 4.00        | WM18613-ND           | 6.29   | 55.77         | 371.96     | 87760-0616        |
|                            | 8             | 8.00 6.00        | WM18614-ND           | 8.76   | 77.62         | 517.60     | 87760-0816        |
|                            | 10            | 10.00 8.00       | WM18615-ND           | 12.41  | 109.17        | 727.77     | 87760-1016        |
|                            | 12            | 12.00 10.00      | WM18616-ND           | 13.35  | 117.75        | 784.73     | 87760-1216        |
|                            | 14            | 14.00 12.00      | WM18617-ND           | 14.11  | 124.38        | 829.20     | 87760-1416        |
|                            | 16            | 16.00 14.00      | WM18618-ND           | 14.88  | 131.02        | 873.58     | 87760-1616        |
|                            | 18            | 18.00 16.00      | WM18619-ND           | 16.66  | 147.42        | 982.66     | 87760-1816        |
|                            | 20            | 20.00 18.00      | WM18620-ND           | 18.53  | 163.75        | 1091.91    | 87760-2016        |
|                            | 22            | 22.00 20.00      | WM18621-ND           | 18.79  | 165.70        | 1104.83    | 87760-2216        |

| Fig.                                | Cir-<br>cuits | Dim. (mm)<br>A B | Digi-Key<br>Part No. | 1      | Pricing<br>10 | 100        | Molex<br>Part No. |
|-------------------------------------|---------------|------------------|----------------------|--------|---------------|------------|-------------------|
| 1                                   | 24            | 24.00 22.00      | WM18622-ND           | 18.62  | 164.09        | 1093.78    | 87760-2416        |
|                                     | 26            | 26.00 24.00      | WM18623-ND           | 22.19  | 195.89        | 1305.91    | 87760-2616        |
|                                     | 28            | 28.00 26.00      | WM18624-ND           | 17.26  | —             | —          | 87760-2816        |
|                                     | 30            | 30.00 28.00      | WM18625-ND           | 25.59  | 225.98        | 1506.55    | 87760-3016        |
|                                     | 32            | 32.00 30.00      | WM18626-ND           | 26.53  | 234.40        | 1562.50    | 87760-3216        |
|                                     | 34            | 34.00 32.00      | WM18627-ND           | 27.21  | 239.93        | 1599.65    | 87760-3416        |
|                                     | 36            | 36.00 34.00      | WM18628-ND           | 27.80  | 245.54        | 1636.89    | 87760-3616        |
|                                     | 38            | 38.00 36.00      | WM18629-ND           | —      | 219.35        | —          | 87760-3816        |
|                                     | 40            | 40.00 38.00      | WM18630-ND           | 29.08  | 256.68        | 1711.28    | 87760-4016        |
|                                     | 42            | 42.00 40.00      | WM18631-ND           | 6.12   | 5.44          | 3.65       | 87760-4216        |
|                                     | 44            | 44.00 42.00      | WM18632-ND           | 30.35  | 267.81        | 1785.68    | 87760-4416        |
|                                     | 46            | 46.00 44.00      | WM18633-ND           | —      | 238.82        | —          | 87760-4616        |
| 48                                  | 48.00 46.00   | WM18634-ND       | —                    | 243.75 | —             | 87760-4816 |                   |
| 50                                  | 50.00 48.00   | WM18635-ND       | 28.48                | 251.15 | 1674.30       | 87760-5016 |                   |
| <b>Shrouded Vertical Headers</b>    |               |                  |                      |        |               |            |                   |
| 2                                   | 4             | 6.65 2.00        | WM18557-ND           | 9.78   | 86.55         | 576.86     | 87831-0420        |
|                                     | 6             | 8.65 4.00        | WM18558-ND           | 10.71  | 94.88         | 632.38     | 87831-0620        |
|                                     | 8             | 10.65 6.00       | WM18559-ND           | 9.27   | 82.04         | 546.93     | 87831-0820        |
|                                     | 10            | 12.65 8.00       | WM18560-ND           | 11.48  | 101.00        | 673.19     | 87831-1020        |
|                                     | 12            | 14.65 10.00      | WM18561-ND           | 13.69  | 121.07        | 807.26     | 87831-1220        |
|                                     | 14            | 16.65 12.00      | WM17469-ND           | 16.07  | 141.73        | 944.83     | 87831-1420        |
|                                     | 16            | 18.65 14.00      | WM18562-ND           | 17.26  | 152.36        | 1015.56    | 87831-1620        |
|                                     | 18            | 20.65 16.00      | WM18563-ND           | 24.06  | 212.12        | 1413.88    | 87831-1820        |
|                                     | 20            | 22.65 18.00      | WM18564-ND           | 22.87  | 202.01        | 1346.72    | 87831-2020        |
|                                     | 22            | 24.65 20.00      | WM18566-ND           | 25.25  | 222.67        | 1484.28    | 87831-2220        |
|                                     | 24            | 26.65 22.00      | WM17470-ND           | 27.55  | 242.73        | 1618.36    | 87831-2420        |
|                                     | 30            | 32.65 28.00      | WM18565-ND           | 34.35  | 303.01        | 2019.91    | 87831-3020        |
| 40                                  | 42.65 38.00   | WM18566-ND       | 45.83                | 404.53 | 2697.09       | 87831-4020 |                   |
| 44                                  | 46.65 42.00   | WM18567-ND       | 50.42                | 444.74 | 2965.07       | 87831-4420 |                   |
| 50                                  | 52.65 48.00   | WM18568-ND       | 57.22                | 505.02 | 3366.79       | 87831-5020 |                   |
| <b>Shrouded Right Angle Headers</b> |               |                  |                      |        |               |            |                   |
| 4                                   | 4             | 6.65 2.00        | WM18858-ND           | 11.22  | 98.79         | 658.48     | 87833-0420        |
|                                     | 6             | 8.65 4.00        | WM18859-ND           | 11.99  | 106.02        | 706.77     | 87833-0620        |
|                                     | 8             | 10.65 6.00       | WM18860-ND           | 12.33  | 108.83        | 725.48     | 87833-0820        |

† Loaded \* Cut Tape ‡ Tape and Reel (Continued)

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