Edgeboard Connectors, Dual Readout, 0.100" (2.54 mm) C-C, Standard and Right Angle Terminals

**ELECTRICAL SPECIFICATIONS**

**Current Rating:** 3 A

**Test Voltage Between Contacts:**
- at sea level: 650 VRMS
- at 70,000 feet (21,336 meters): 275 VRMS

**Insulation Resistance:** 5000 MΩ minimum at 500 VDC potential

**Contact Resistance:** 30 mV maximum at rated current (with gold plating)

**Operating Temperature:** -65 °C to +125 °C

**Humidity:** 96 h at 90 % relative humidity at +40 °C, dried at room temperature for 3 h minimum, insulation resistance was greater than 5000 MΩ

**Durability:** after 500 cycles of insertion and withdrawal of a 0.070" (1.78 mm) thick steel test board, contact resistance less than 0.030 V at 3 A on gold plated contacts and individual contact pair separation force when measured with a 0.054" (1.37 mm) thick steel test blade was greater than ½ oz.

**Shock:** three 50G shocks in each of 3 mutually perpendicular planes with no loss of continuity

**Vibration:** 2 h in each of 3 mutually perpendicular planes, frequency sweep 10 cps to 55 cps at 0.06 double amplitude with no loss of continuity

**FEATURES**

- Grid patterns: 0.100” C-C x 0.150” (2.54 mm x 3.81 mm) and 0.100” C-C x 0.200” (2.54 mm x 5.08 mm)
- Standard and right angle terminals
- Greater design latitude:
  - body materials: glass-filled polyester and glass-filled polyphenylene sulfide
  - 7 contact termination styles - 3 standard, 4 right angle
  - 20 body sizes and 6 mounting styles
- Selective gold plating
- Accepts PC board thickness of 0.054” to 0.071” (1.37 mm to 1.80 mm)
- Polarization between contact positions in all sizes.
  - Between contact polarization permits polarizing without loss of contact position

**APPLICATIONS**

For use with 0.0625” (1.59 mm) printed circuit boards requiring an edgeboard type connector on 0.100” (2.54 mm) centers

**MATERIAL SPECIFICATIONS**

**Body Material:**
- “3” thermoplastic polyester, glass-filled, black, flame retardant (UL 94 V-0)
- “5” thermoplastic polyphenylene sulfide, glass filled, brown, flame retardant (UL 94 V-0)

**Contacts:** phosphor bronze (see Ordering Information)

**Polarizing Key:** glass reinforced nylon, flame retardant (UL 94H-B)

**Plating:** gold (see Ordering Information)

**ORDERING INFORMATION**

<table>
<thead>
<tr>
<th>EB4</th>
<th>3</th>
<th>K</th>
<th>CONTACTS</th>
<th>CONTACT PLATING</th>
<th>MOUNTING VARIATIONS</th>
<th>POLARIZING KEY POSITIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>MODEL</td>
<td>BODY MATERIAL</td>
<td>STANDARD TERMINAL VARIATIONS</td>
<td>PER SIDE</td>
<td>SG = selective gold plating (0.00003” (0.000762 mm) minimum thickness on contact area with gold flash on terminal)</td>
<td>X = selective gold plating (0.000010” (0.000254 mm) minimum thickness on contact area with gold flash on terminal)</td>
<td>Key(s) are located to right of position(s) designated. Use odd-numbered contact for ordering: -1, -3, -5, etc. Required only when polarizing keys are to be factory installed. Note: to order polarizing keys individually, specify model PK-4.</td>
</tr>
<tr>
<td>3</td>
<td>glass-filled polyester</td>
<td>C, D, K, 1R, 2R, 3R, 4R</td>
<td>6, 10, 12, 15, 18, 20, 22, 25, 28, 30, 31, 35, 36, 40, 43, 44, 48, 49, 50, 60, and 65</td>
<td>All gold plating over 0.00005” (0.00127 mm) minimum nickel underplate. Contact factory for additional plating options</td>
<td></td>
<td></td>
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<tr>
<td>5</td>
<td>glass-filled polyphenylene sulfide</td>
<td></td>
<td></td>
<td></td>
<td></td>
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</table>

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For technical questions, contact: connectors@vishay.com

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DIMENSIONS in inches (millimeters)

<table>
<thead>
<tr>
<th># OF CONTACT POSITIONS PER SIDE</th>
<th>A</th>
<th>B</th>
<th>C</th>
<th>D</th>
<th>E</th>
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</thead>
<tbody>
<tr>
<td>6</td>
<td>1.435 (36.45)</td>
<td>1.175 (29.85)</td>
<td>0.700 (17.78)</td>
<td>0.860 (21.84)</td>
<td>0.750 (19.05)</td>
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<tr>
<td>10</td>
<td>1.835 (46.61)</td>
<td>1.575 (40.00)</td>
<td>1.100 (27.94)</td>
<td>1.260 (32.00)</td>
<td>1.150 (29.21)</td>
</tr>
<tr>
<td>12</td>
<td>2.035 (51.69)</td>
<td>1.775 (45.08)</td>
<td>1.300 (33.02)</td>
<td>1.460 (37.08)</td>
<td>1.350 (34.29)</td>
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<tr>
<td>15</td>
<td>2.335 (59.31)</td>
<td>2.075 (52.70)</td>
<td>1.600 (40.64)</td>
<td>1.760 (44.70)</td>
<td>1.650 (41.91)</td>
</tr>
<tr>
<td>18</td>
<td>2.635 (66.93)</td>
<td>2.375 (60.32)</td>
<td>1.900 (48.26)</td>
<td>2.060 (52.32)</td>
<td>1.950 (49.53)</td>
</tr>
<tr>
<td>20</td>
<td>2.835 (72.01)</td>
<td>2.575 (65.40)</td>
<td>2.100 (53.34)</td>
<td>2.260 (57.40)</td>
<td>2.150 (54.61)</td>
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<tr>
<td>22</td>
<td>3.035 (77.09)</td>
<td>2.775 (70.48)</td>
<td>2.300 (58.42)</td>
<td>2.460 (62.48)</td>
<td>2.350 (59.69)</td>
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<tr>
<td>25</td>
<td>3.335 (84.71)</td>
<td>3.075 (78.10)</td>
<td>2.600 (66.04)</td>
<td>2.760 (70.10)</td>
<td>2.650 (67.31)</td>
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<tr>
<td>28</td>
<td>3.635 (92.33)</td>
<td>3.375 (85.72)</td>
<td>2.900 (73.66)</td>
<td>3.060 (77.72)</td>
<td>2.950 (74.93)</td>
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<tr>
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<td>3.575 (90.80)</td>
<td>3.100 (78.74)</td>
<td>3.260 (82.80)</td>
<td>3.150 (80.01)</td>
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<tr>
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<td>3.935 (99.95)</td>
<td>3.675 (93.34)</td>
<td>3.200 (81.28)</td>
<td>3.360 (85.34)</td>
<td>3.250 (82.55)</td>
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<tr>
<td>35</td>
<td>4.335 (110.11)</td>
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<td>3.600 (91.44)</td>
<td>3.760 (95.50)</td>
<td>3.650 (92.71)</td>
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<tr>
<td>36</td>
<td>4.435 (112.65)</td>
<td>4.175 (106.04)</td>
<td>3.700 (93.98)</td>
<td>3.860 (98.04)</td>
<td>3.750 (85.25)</td>
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<td>40</td>
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<td>4.575 (116.20)</td>
<td>4.100 (104.14)</td>
<td>4.260 (108.20)</td>
<td>4.150 (105.41)</td>
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<tr>
<td>43</td>
<td>5.135 (130.43)</td>
<td>4.875 (123.82)</td>
<td>4.400 (111.76)</td>
<td>4.560 (115.82)</td>
<td>4.450 (113.03)</td>
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<tr>
<td>44</td>
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<td>4.500 (114.30)</td>
<td>4.660 (118.36)</td>
<td>4.550 (115.57)</td>
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<tr>
<td>48</td>
<td>5.635 (143.13)</td>
<td>5.375 (136.52)</td>
<td>4.900 (124.46)</td>
<td>5.060 (128.52)</td>
<td>4.950 (125.73)</td>
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<tr>
<td>49</td>
<td>5.735 (145.67)</td>
<td>5.475 (139.06)</td>
<td>5.000 (127.00)</td>
<td>5.160 (131.06)</td>
<td>5.050 (128.27)</td>
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<tr>
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<td>5.575 (141.60)</td>
<td>5.100 (129.54)</td>
<td>5.260 (133.60)</td>
<td>5.150 (130.81)</td>
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<tr>
<td>60</td>
<td>6.835 (173.61)</td>
<td>6.575 (167.00)</td>
<td>6.100 (154.94)</td>
<td>6.260 (159.00)</td>
<td>6.150 (156.21)</td>
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<tr>
<td>65</td>
<td>7.335 (186.31)</td>
<td>7.075 (179.70)</td>
<td>6.600 (167.64)</td>
<td>6.760 (171.70)</td>
<td>6.650 (168.91)</td>
</tr>
</tbody>
</table>

Polarizing Key:
When ordering polarizing keys individually, specify by the Model Number:
PK-4 between contacts. Hand insertion tool, TPK-4, provided upon request.
PHYSICAL SPECIFICATIONS

Contact Type: bifurcated cantilever beam
Number of Contacts: 10, 12, 15, 18, 20, 22, 25, 28, 30, 31, 35, 36, 40, 43, 44, 48, 49, 50, 60 and 65 per side
Contact Terminal Variation: Standard terminals
Type “C” - dip solder, 0.025” (0.635 mm) square terminals, 0.175” (4.44 mm) nominal terminal length below standoffs
Type “D” - dip solder, 0.025” (0.635 mm) square terminals, 0.115” (2.92 mm) nominal terminal length below standoffs
Type “K” - Wire Wrap™, 0.025” (0.635 mm) square terminals, 0.570” (14.48 mm) nominal terminal length below standoffs
Contact Terminal Variation: Right angle terminals
Type “1R” - dip solder, 0.025” (0.635 mm) square terminals, 0.120” (3.05 mm) nominal terminal length x 0.150” (3.81 mm) nominal terminal row spacing
Type “2R” - dip solder, 0.025” (0.635 mm) square terminals, 0.120” (3.05 mm) nominal terminal length x 0.200” (5.08 mm) nominal terminal row spacing
Type “3R” - dip solder, 0.025” (0.635 mm) square terminals, 0.180” (4.57 mm) nominal terminal length x 0.150” (3.81 mm) nominal terminal row spacing
Type “4R” - dip solder, 0.025” (0.635 mm) square terminals, 0.180” (4.57 mm) nominal terminal length x 0.200” (5.08 mm) nominal terminal row spacing

Contact Spacing: 0.100” (2.54 mm) center to center
Contact Terminal Row Spacing: Standard - 0.200” (5.08 mm) nominal and 0.150” (3.81 mm) nominal
Card Thickness: 0.054” to 0.071” (1.37 mm to 1.80 mm)
Card Slot Depth: 0.300” (7.62 mm)
Connector Polarization: between contact polarization key(s) are located to the right of the contact position(s) designated

Note
• High temperature burn-in, edgeboard connectors, with 0.100” (2.54 mm) center to center are on www.vishay.com/doc?36006

MOUNTING VARIATIONS in inches (millimeters)

TERMINAL VARIATIONS in inches (millimeters)
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