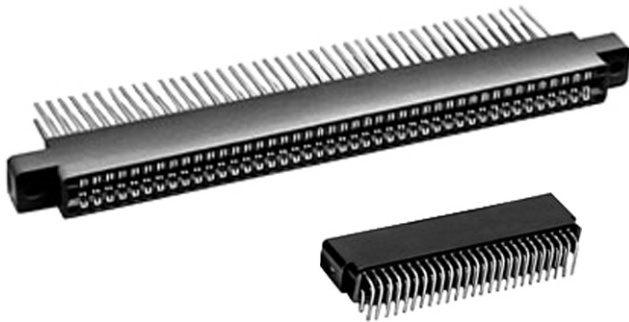


# Edgeboard Connectors, Dual Readout, 0.100" (2.54 mm) C-C, Standard and Right Angle Terminals



## ELECTRICAL SPECIFICATIONS

**Current Rating:** 3 A

**Test Voltage Between Contacts:**

at sea level: 650 V<sub>RMS</sub>

At 70 000 feet (21 336 meters): 275 V<sub>RMS</sub>

**Insulation Resistance:** 5000 MΩ minimum at 500 V<sub>DC</sub> 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 1/2 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)
- Between contact polarization available (to be installed by customer); 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

"5" thermoplastic polyphenylene sulfid, glass filled, brown, flame retardant

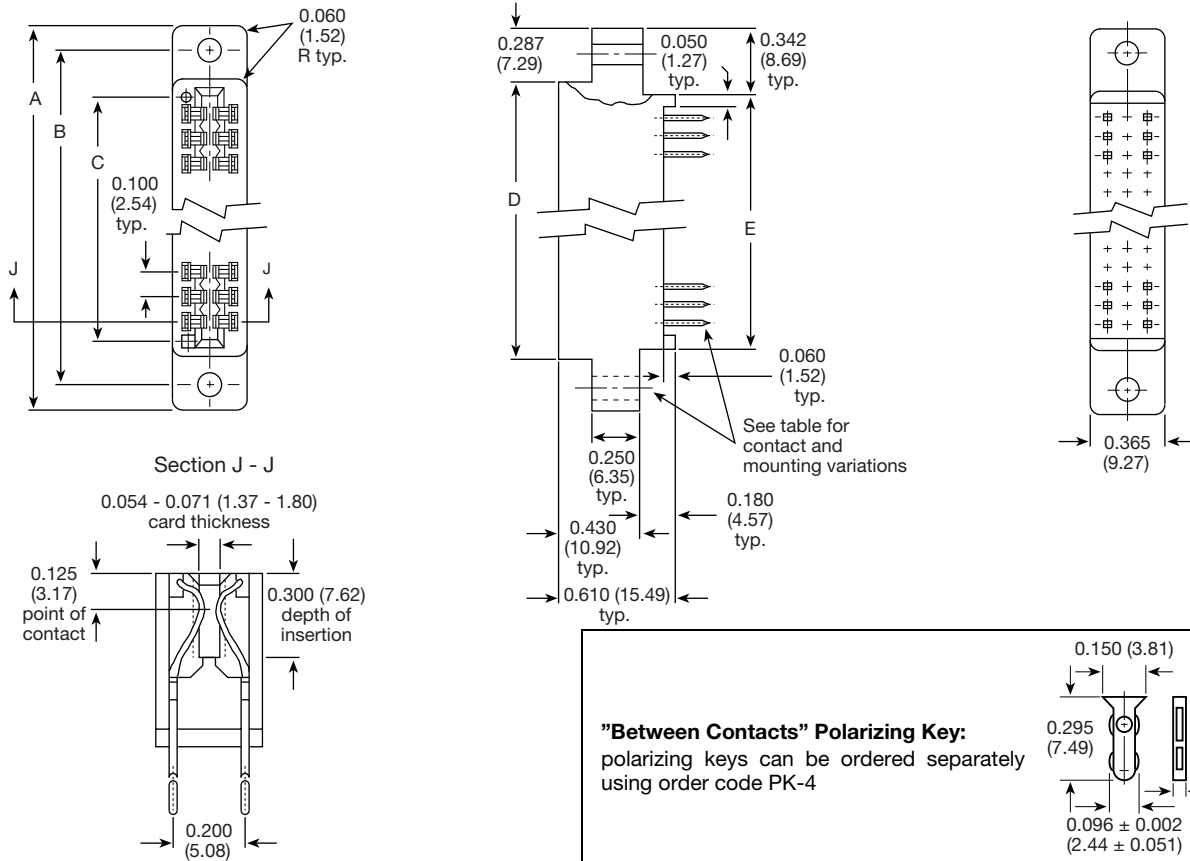
**Contacts:** phosphor bronze (see Ordering Information)

**Polarizing Key:** glass reinforced nylon, flame retardant

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

## ORDERING INFORMATION

EB4	3	-	K	10	SG	XF
MODEL	BODY MATERIAL		TERMINAL VARIATIONS	CONTACTS PER SIDE	CONTACT PLATING	MOUNTING VARIATIONS
	3 = glass-filled polyester 5 = glass-filled polyphenylene sulfide		C, D, K, 1R, 2R, 3R, or 4R	6, 10, 12, 15, 18, 20, 22, 25, 28, 30, 31, 35, 36, 40, 43, 44, 48, 49, 50, 60, or 65	<b>SG</b> = selective gold plating (0.00003" = 0.000762 mm min. thick) on contact area with gold flash on terminal <b>SGF</b> = selective gold plating (0.000010" = 0.000254 mm min. thick) on contact area with gold flash on terminal All gold plating uses 0.00005" = 0.00127 mm min. nickel underplate Contact factory for additional plating options	X, XF, XS, XFS, Y, YF, or W

**DIMENSIONS** in inches (millimeters)


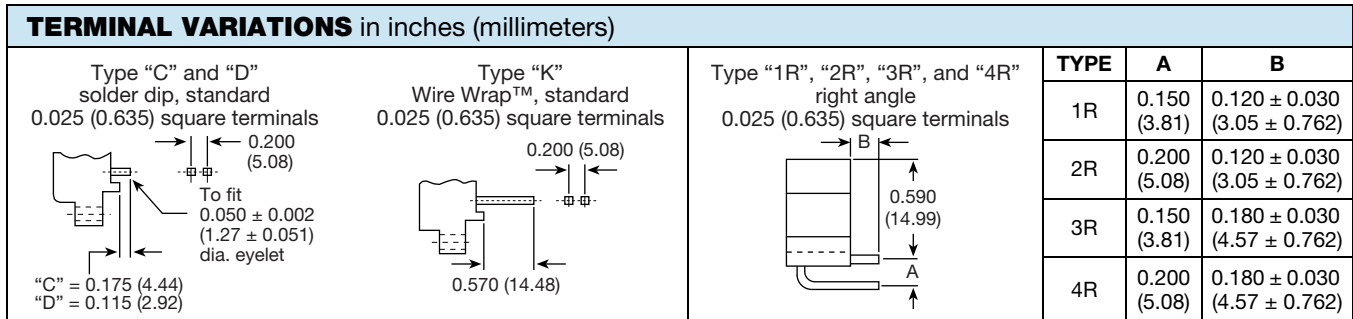
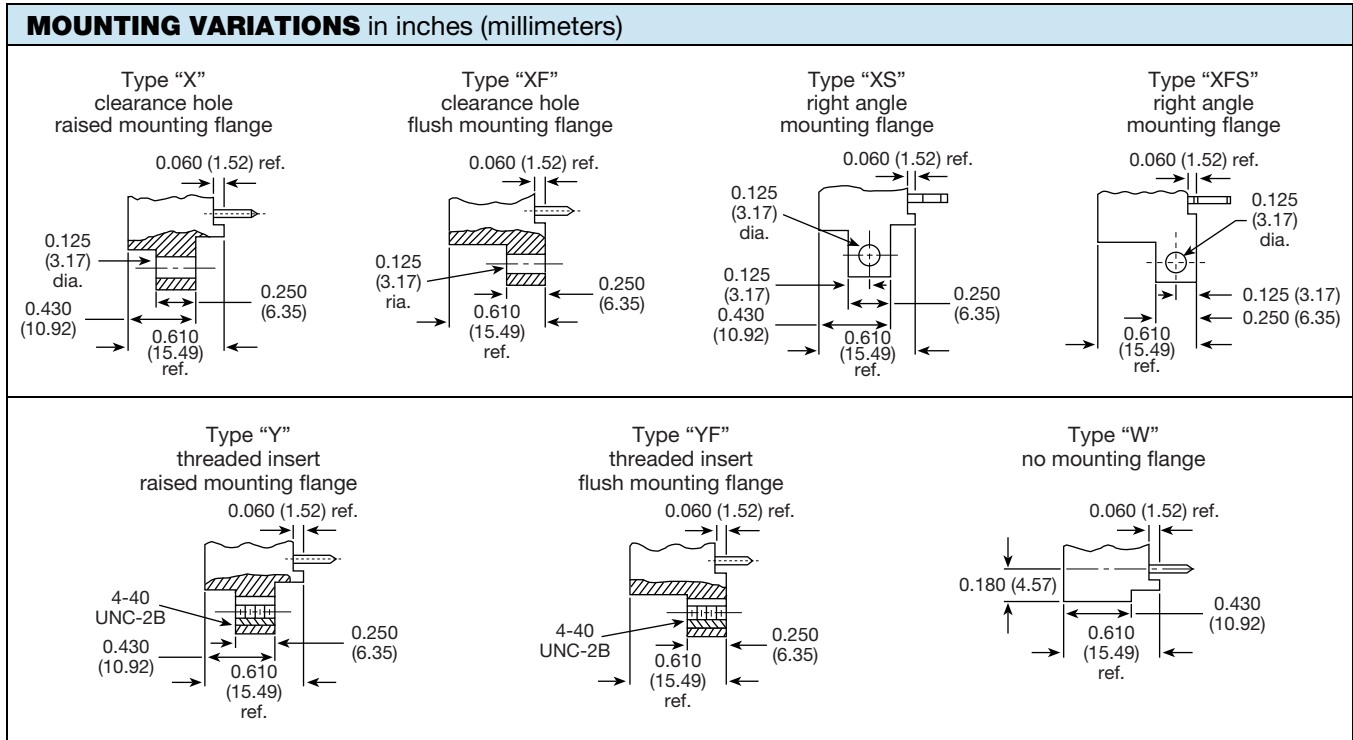
# OF CONTACT POSITIONS PER SIDE	A	B	C	D	E
6	1.435 (36.45)	1.175 (29.85)	0.700 (17.78)	0.860 (21.84)	0.750 (19.05)
10	1.835 (46.61)	1.575 (40.00)	1.100 (27.94)	1.260 (32.00)	1.150 (29.21)
12	2.035 (51.69)	1.775 (45.08)	1.300 (33.02)	1.460 (37.08)	1.350 (34.29)
15	2.335 (59.31)	2.075 (52.70)	1.600 (40.64)	1.760 (44.70)	1.650 (41.91)
18	2.635 (66.93)	2.375 (60.32)	1.900 (48.26)	2.060 (52.32)	1.950 (49.53)
20	2.835 (72.01)	2.575 (65.40)	2.100 (53.34)	2.260 (57.40)	2.150 (54.61)
22	3.035 (77.09)	2.775 (70.48)	2.300 (58.42)	2.460 (62.48)	2.350 (59.69)
25	3.335 (84.71)	3.075 (78.10)	2.600 (66.04)	2.760 (70.10)	2.650 (67.31)
28	3.635 (92.33)	3.375 (85.72)	2.900 (73.66)	3.060 (77.72)	2.950 (74.93)
30	3.835 (97.41)	3.575 (90.80)	3.100 (78.74)	3.260 (82.80)	3.150 (80.01)
31	3.935 (99.95)	3.675 (93.34)	3.200 (81.28)	3.360 (85.34)	3.250 (82.55)
35	4.335 (110.11)	4.075 (103.50)	3.600 (91.44)	3.760 (95.50)	3.650 (92.71)
36	4.435 (112.65)	4.175 (106.04)	3.700 (93.98)	3.860 (98.04)	3.750 (95.25)
40	4.835 (122.81)	4.575 (116.20)	4.100 (104.14)	4.260 (108.20)	4.150 (105.41)
43	5.135 (130.43)	4.875 (123.82)	4.400 (111.76)	4.560 (115.82)	4.450 (113.03)
44	5.235 (132.97)	4.975 (126.36)	4.500 (114.30)	4.660 (118.36)	4.550 (115.57)
48	5.635 (143.13)	5.375 (136.52)	4.900 (124.46)	5.060 (128.52)	4.950 (125.73)
49	5.735 (145.67)	5.475 (139.06)	5.000 (127.00)	5.160 (131.06)	5.050 (128.27)
50	5.835 (148.21)	5.575 (141.60)	5.100 (129.54)	5.260 (133.60)	5.150 (130.81)
60	6.835 (173.61)	6.575 (167.00)	6.100 (154.94)	6.260 (159.00)	6.150 (156.21)
65	7.335 (186.31)	7.075 (179.70)	6.600 (167.64)	6.760 (171.70)	6.650 (168.91)

**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. Right angle - 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](http://www.vishay.com/doc?36006)





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