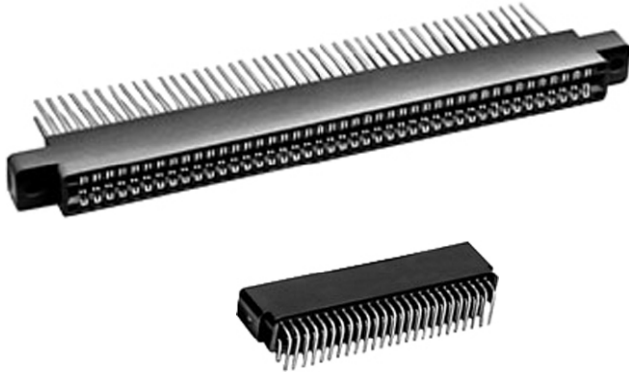


# Edgeboard Connectors, Dual Readout, 0.100" (2.54 mm) C-C, Standard and Right Angle Terminals



## 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

## 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

## 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 sulfid, glass filled, brown, flame retardant (UL 94 V-0)

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

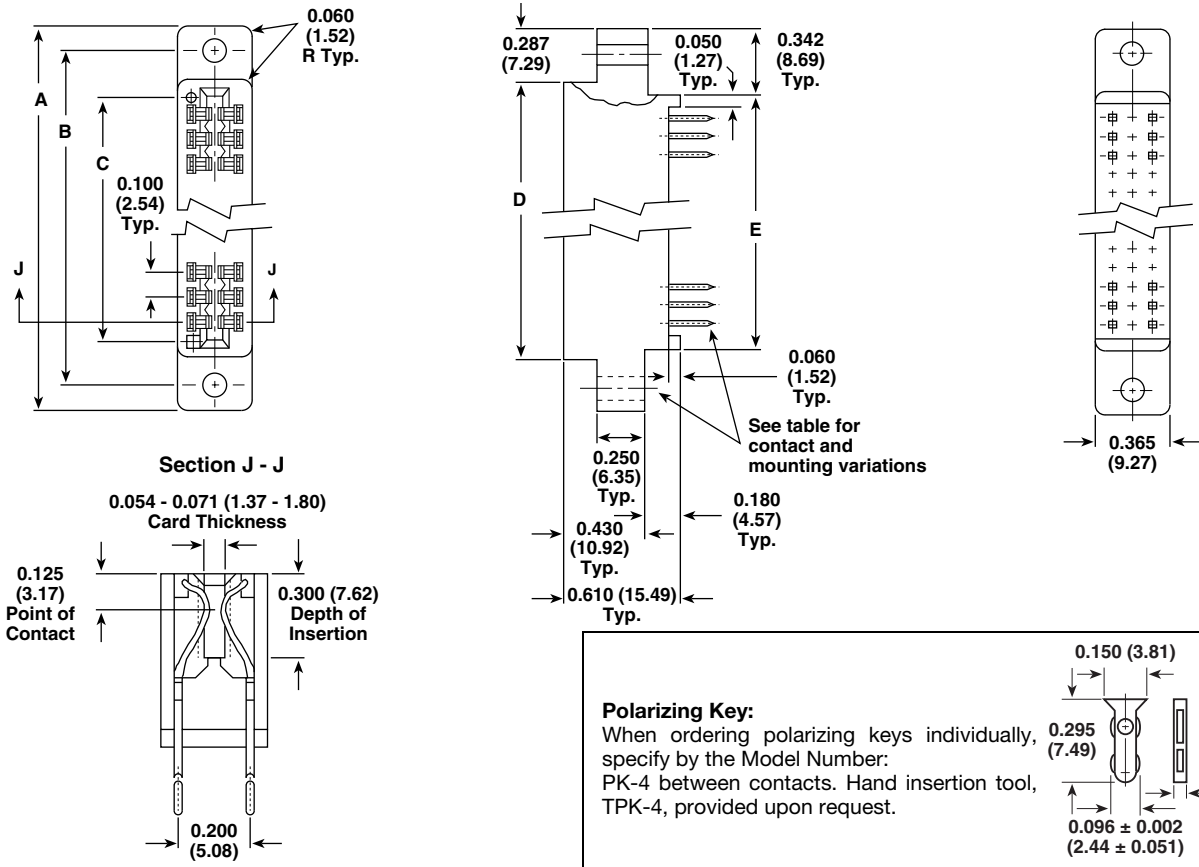
**Polarizing Key:** glass reinforced nylon, flame retardant (UL 94H-B)

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

## ORDERING INFORMATION

EB4	3	K	20	SG	X	15
MODEL	BODY MATERIAL	STANDARD TERMINAL VARIATIONS	CONTACTS PER SIDE	CONTACT PLATING	MOUNTING VARIATIONS	POLARIZING KEY POSITIONS
	3 = glass-filled polyester 5 = glass-filled polyphenylene sulfide	C, D, K, 1R, 2R, 3R, 4R	6, 10, 12, 15, 18, 20, 22, 25, 28, 30, 31, 35, 36, 40, 43, 44, 48, 49, 50, 60, and 65	SG = selective gold plating (0.00003" (0.000762 mm) minimum thick) on contact area with gold flash on terminal. SGF = selective gold plating (0.000010" (0.000254 mm) minimum thick) on contact area with gold flash on terminal. All gold plating over 0.00005" (0.00127 mm) minimum nickel underplate. Contact factory for additional plating options		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. <b>Note:</b> to order polarizing keys individually, specify model PK-4.

**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

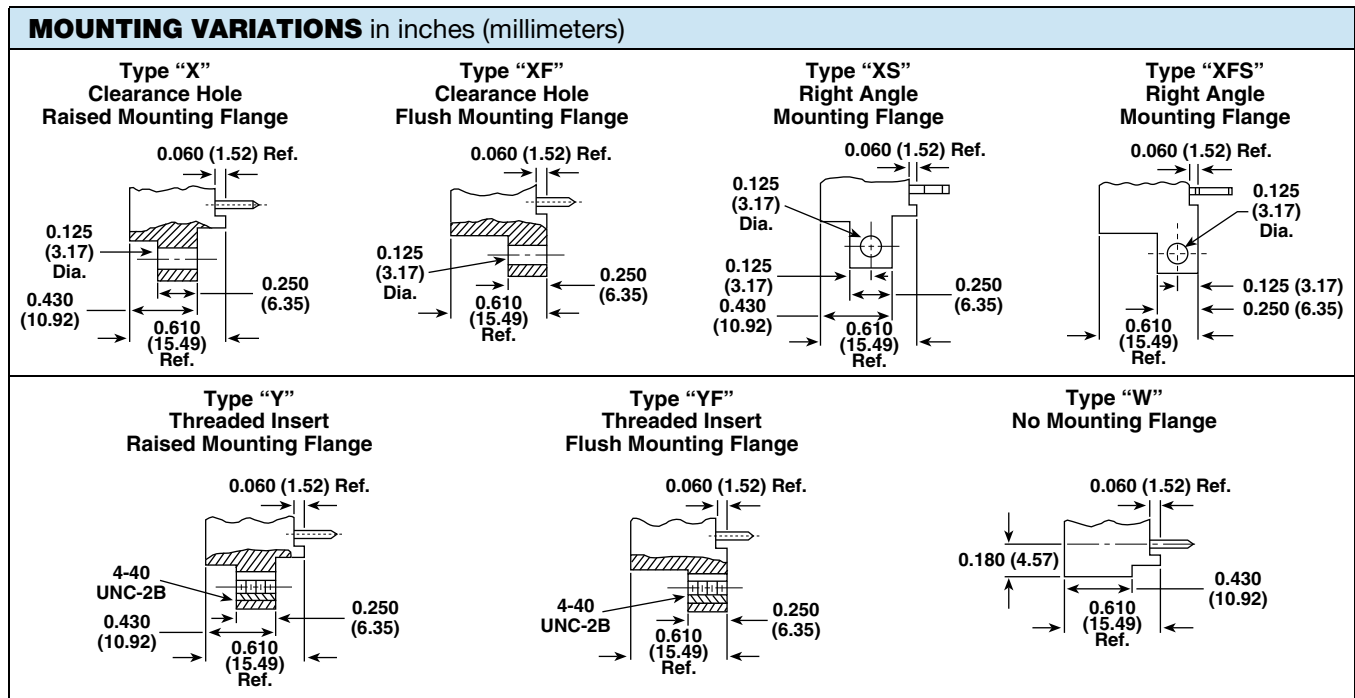
**Card Thickness:** 0.054" to 0.071" (1.37 mm to 1.80 mm)

**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)



**TERMINAL VARIATIONS** in inches (millimeters)

TYPE	TYPE “C” and “D” Solder Dip, Standard 0.025 (0.635) Square Terminals		TYPE “K” Wire Wrap™, Standard 0.025 (0.635) Square Terminals	TYPE “1R”, “2R”, “3R” and “4R” Right Angle 0.025 (0.635) Square Terminals	TYPE	A	B
	Diagram	Diagram					
1R				1R	0.150 (3.81)	0.120 ± 0.030 (3.05 ± 0.762)	
2R				2R	0.200 (5.08)	0.120 ± 0.030 (3.05 ± 0.762)	
3R				3R	0.150 (3.81)	0.180 ± 0.030 (4.57 ± 0.762)	
4R				4R	0.200 (5.08)	0.180 ± 0.030 (4.57 ± 0.762)	



## **Disclaimer**

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.