

## Edgeboard Connectors, Dual Readout



### ELECTRICAL SPECIFICATIONS

**Current Rating:** 5 A

**Test Voltage Between Contacts:**

At sea level: 1800 V<sub>RMS</sub>

At 70 000 feet (21 336 meters): 450 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:** - 55 °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 gauge, contact resistance less than 0.030 V at 5 A and individual contact retention force when measured with 0.054" (1.37 mm) thick steel test slug 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

### PHYSICAL SPECIFICATIONS

**Contact Type:** Bifurcated bellows

**Number of Contacts:** 6, 10, 12, 15, 18, 22, 36, 43 per side

**Contact Spacing:** 0.156" (3.96 mm) center to center

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

**Card Slot Depth:** Dual readout = 0.260" (6.60 mm)

**Note**

- High temperature burn-in, edgeboard connectors, 0.156" (3.96 mm) center to center are on [www.vishay.com/doc?36006](http://www.vishay.com/doc?36006)

### FEATURES

- 0.156" C-C x 0.140" grid (3.96 mm x 3.56 mm)
- Bifurcated bellows contacts provide 2 flexing contact surfaces to assure positive contact under adverse conditions such as vibration or PC board irregularities
- 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
- Selective gold plating
- Polarizing key is reinforced nylon, may be inserted by hand, requires no adhesive.
- Protected entry, provided by recessed leading edge of contact, permits the card slot to straighten and align the board before electrical contact is made. Prevents damage to contact which might be caused by warped or out of tolerance boards
- **Recognized under the Component Program of Underwriters Laboratories, Inc. listed under file E65524, project 77CH3889**

### APPLICATIONS

For use with 0.062" (1.57 mm) printed circuit boards requiring an edgeboard type connector on 0.156" (3.96 mm) centers

### MATERIAL SPECIFICATIONS

**Body:** (Standard) glass-filled phenolic per MIL-M-14, dark green, flame retardant (UL 94 V-0). (Optional - see Ordering Information)

"1" glass-filled diallyl phthalate per MIL-M-14, type SDG-F green, flame retardant (UL 94 V-0)

"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

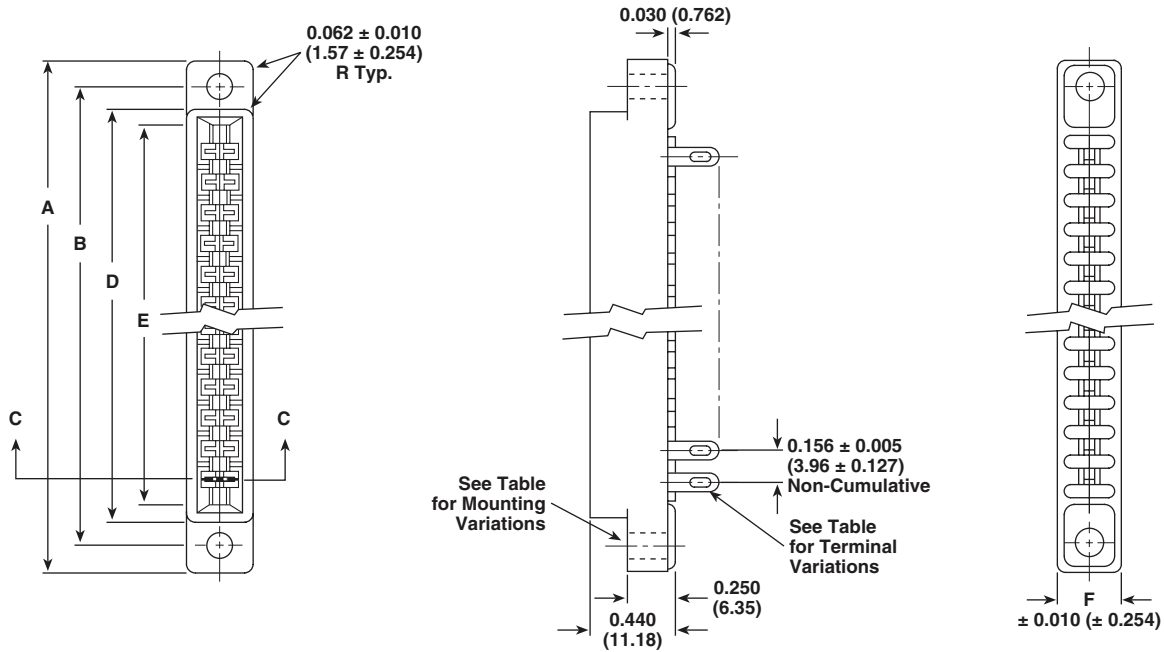
**Polarizing Key:** Glass reinforced nylon, flame retardant (UL 94H-B)

**Contact Plating:** Gold (See Ordering Information)

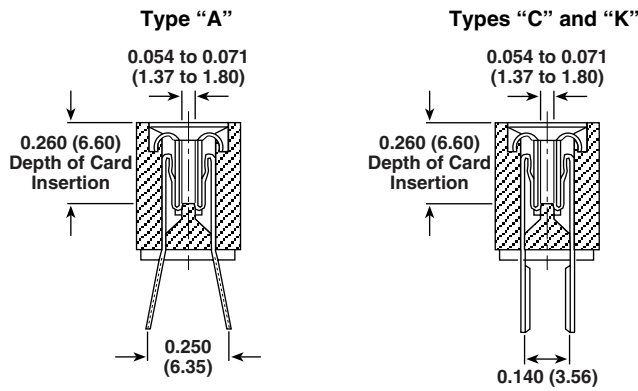
### ORDERING INFORMATION

EB7	1	D	B	A	22	SG	X	A
MODEL	BODY MATERIAL	DUAL READOUT	OPTIONAL CONTACTS	STANDARD TERMINAL VARIATIONS	CONTACTS PER SIDE	CONTACT PLATING	MOUNTING VARIATIONS	POLARIZING KEY POSITIONS
	Optional body material 1 = Diallyl Phthalate 3 = Glass-filled Polyester 5 = Glass-filled Polyphenylene Sulfid □ = Omit number for standard phenolic		Beryllium Copper copntacts optional Available in "A" and "E" contact styles only (Omit for standard)	A, E, C, or K	6, 10, 12, 15, 18, 22, 36, or 43	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. Required only when polarizing keys are to be factory installed

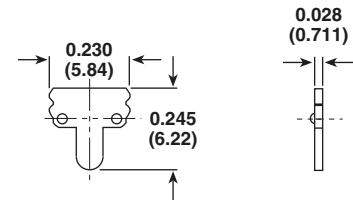
**DIMENSIONS** in inches (millimeters)



**Section C to C:**



**Polarizing Key:**



When ordering polarizing keys individually, specify by the Model Number: PK-7 between contacts. Hand insertion tool, TPK-7, provided upon request.

# OF CONTACT POSITIONS PER SIDE	A	B	D	E	F
6	1.78 (45.21)	1.53 (38.86)	1.22 (30.99)	1.10 (27.94)	0.328 (8.33)
10	2.41 (61.21)	2.16 (54.86)	1.84 (46.74)	1.72 (43.69)	0.328 (8.33)
12	2.72 (69.09)	2.47 (62.74)	2.16 (54.86)	2.04 (51.82)	0.328 (8.33)
15	3.19 (81.03)	2.94 (74.68)	2.62 (66.55)	2.50 (63.50)	0.328 (8.33)
18	3.66 (92.96)	3.41 (86.61)	3.09 (78.49)	2.97 (75.44)	0.328 (8.33)
22	4.28 (108.71)	4.03 (102.36)	3.72 (94.49)	3.60 (91.44)	0.328 (8.33)
36	6.53 (165.86)	6.22 (157.99)	5.91 (150.11)	5.78 (146.81)	0.438 (11.13)
43	7.62 (193.55)	7.30 (185.42)	7.00 (177.80)	6.80 (172.72)	0.500 (12.70)

MOUNTING VARIATIONS in inches (millimeters)			
<p><b>Type "V"</b> Clearance Hole</p>	<p><b>Type "VI"</b> Clearance Hole No Mounting Pad</p>	<p><b>Type "W"</b> No Mounting Flange</p>	<p><b>Type "X"</b> Clearance Hole</p>
<p><b>Type "XI"</b> Clearance Hole No Mounting Pad</p>	<p><b>Type "Y"</b> Threaded Insert</p>	<p><b>Type "Z"</b> Floating Bushing Radial Float 0.047 (1.19)</p> <p><b>Note:</b> Overall body length increased by 0.060 (1.52)</p>	

TERMINAL VARIATIONS in inches (millimeters)								
<p><b>Type "A"</b> Pierced</p> <p>To fit 3, #22 AWG Wires</p>	<p><b>Type "C" and "K"</b> Solder Dip</p> <p>To fit 0.051 (1.30), Min. Through Hole</p>	<p><b>Type "E"</b> Card Extender</p> <p>Uses Type "A" Contact</p>						
	<table border="1"> <thead> <tr> <th>TYPE</th> <th>G</th> </tr> </thead> <tbody> <tr> <td>C</td> <td>0.125 ± 0.015 (3.18 ± 0.381)</td> </tr> <tr> <td>K</td> <td>0.200 ± 0.015 (5.08 ± 0.381)</td> </tr> </tbody> </table>	TYPE	G	C	0.125 ± 0.015 (3.18 ± 0.381)	K	0.200 ± 0.015 (5.08 ± 0.381)	
TYPE	G							
C	0.125 ± 0.015 (3.18 ± 0.381)							
K	0.200 ± 0.015 (5.08 ± 0.381)							



## 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.

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 and agree to fully indemnify and hold Vishay and its distributors harmless from and against any and all claims, liabilities, expenses and damages arising or resulting in connection with such use or sale, including attorneys fees, even if such claim alleges that Vishay or its distributor was negligent regarding the design or manufacture of the part. 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.

## Material Category Policy

**Vishay Intertechnology, Inc. hereby certifies that all its products that are identified as RoHS-Compliant fulfill the definitions and restrictions defined under Directive 2011/65/EU of The European Parliament and of the Council of June 8, 2011 on the restriction of the use of certain hazardous substances in electrical and electronic equipment (EEE) - recast, unless otherwise specified as non-compliant.**

**Please note that some Vishay documentation may still make reference to RoHS Directive 2002/95/EC. We confirm that all the products identified as being compliant to Directive 2002/95/EC conform to Directive 2011/65/EU.**