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# EB7D

Vishay Dale



## 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

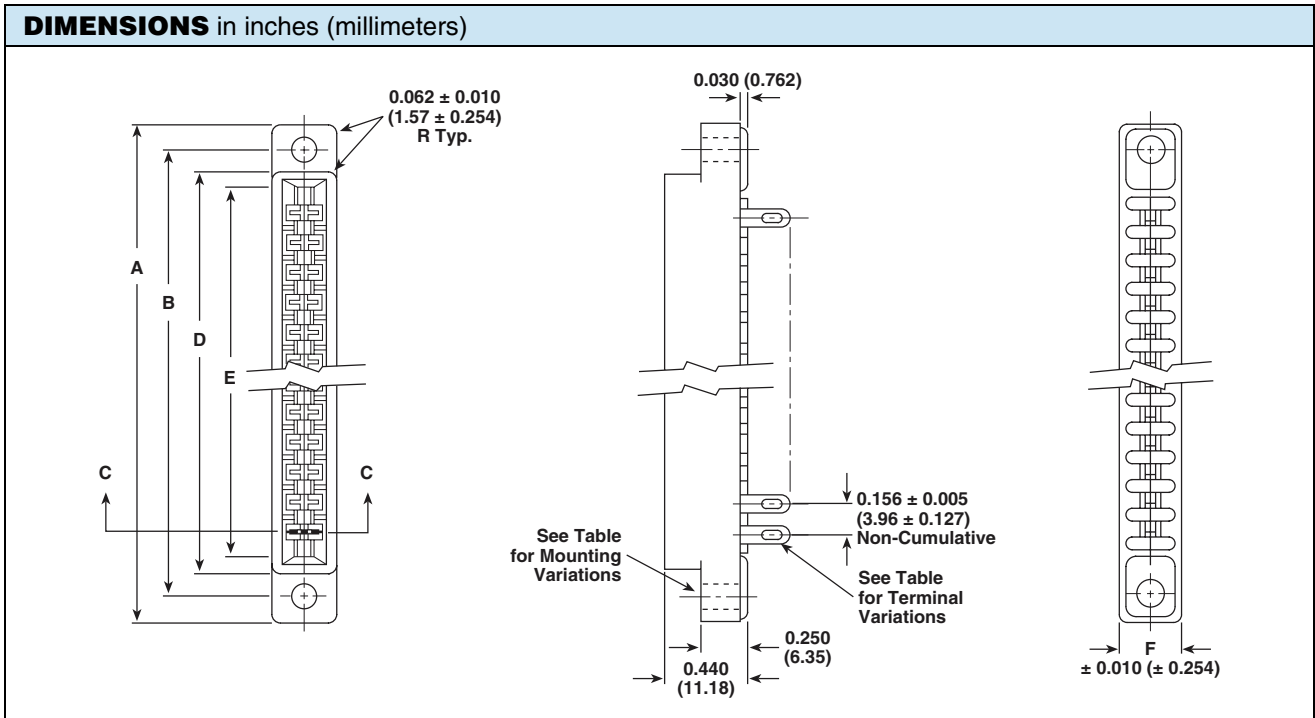
EB7	1	D	B	A	22	SG	X	A
MODEL	BODY MATERIAL	DUAL READOUT	OPTIONAL CONTACTS	STANDARD TERMINAL VARIATIONS	CONTACTS PER SIDE	CONTACT PLATING	MOUNTING VARIATIONS	POLARIZING KEY POSITIONS
	Optional body material 1 = Diallyl Phthalate 3 = Glass-filled Polyester 5 = Glass-filled Polyphenylene Sulfid □ = Omit 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



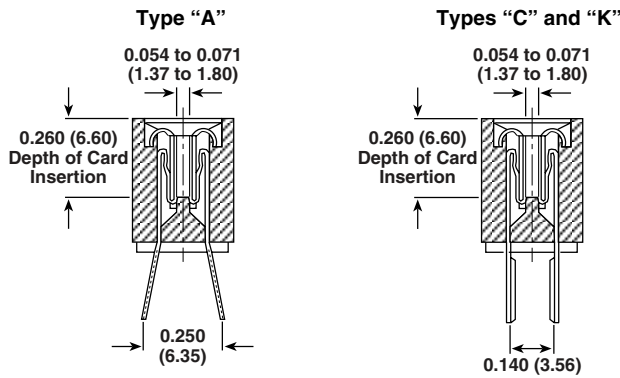
Edgeboard Connectors, Dual Readout

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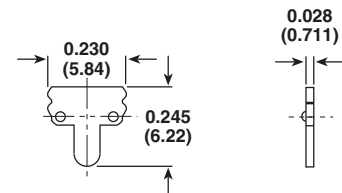
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Section C to C:



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)

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**MOUNTING VARIATIONS** in inches (millimeters)

<p><b>Type "V"</b> Clearance Hole</p> <p>0.250 (6.35) Ref. 0.142 (3.61) Dia.</p>	<p><b>Type "VI"</b> Clearance Hole No Mounting Pad</p> <p>0.250 (6.35) Ref. 0.142 (3.61) Dia. 0.220 (5.59) Ref.</p>	<p><b>Type "W"</b> No Mounting Flange</p> <p>0.010 (0.254) 0.000 (0.000)</p>	<p><b>Type "X"</b> Clearance Hole</p> <p>0.250 (6.35) Ref. 0.128 (3.25) Dia.</p>
<p><b>Type "XI"</b> Clearance Hole No Mounting Pad</p> <p>0.250 (6.35) Ref. 0.128 (3.25) Dia. 0.220 (5.59) Ref.</p>	<p><b>Type "Y"</b> Threaded Insert</p> <p>0.250 (6.35) Ref. 4-40 UNC-2B 0.218 (5.54) Ref.</p>	<p><b>Type "Z"</b> Floating Bushing Radial Float 0.047 (1.19)</p> <p>0.250 (6.35) Ref. 0.116 (2.95) Dia. 0.270 (6.86)</p> <p>Note: 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>0.086 x 0.008 (2.18 x 0.203) 0.220 ± 0.015 (5.59 ± 0.381)</p>	<p><b>Type "C" and "K"</b> Solder Dip</p> <p>To fit 0.051 (1.30), Min. Through Hole</p> <p>0.140 ± 0.015 (3.56 ± 0.381) G See Table</p> <table border="1" data-bbox="453 1657 831 1774"> <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)	<p><b>Type "E"</b> Card Extender</p> <p>0.200 ± 0.015 (5.08 ± 0.381) 0.100 (2.54) 0.050 (1.27) 120° Typ. 15° Typ. Uses Type "A" Contact</p>
TYPE	G							
C	0.125 ± 0.015 (3.18 ± 0.381)							
K	0.200 ± 0.015 (5.08 ± 0.381)							



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