



## .156" [3.96 mm] Contact Centers, .610" [15.49 mm] Insulator Height, Dip Solder/Wire Wrap/Right Angle/Card Extender

### SPECIFICATIONS

- Accommodates .062"  $\pm$  .008" [1.57 mm  $\pm$  0.20 mm] PC board  
(See following pages for .093"  $\pm$  .008" [2.36 mm  $\pm$  0.20 mm]  
and .125"  $\pm$  .008" [3.18 mm  $\pm$  0.20 mm] mating PCB)
- PBT, PPS or PA9T insulator
- Molded-in key available
- 3 Amps current rating for one contact energized
- 30 milli Ohms maximum at rated current
- UL Flammability Rating: 94V-0



### READOUT



### POLARIZING KEY

#### PLC-K1



**KEY IN BETWEEN CONTACTS  
(ORDER SEPARATELY)**

### TERMINATION TYPE

| HAIRPIN BELLOWS | TERMINATION TYPE | POST CROSS SECTION K        | POST LENGTH L<br>.025" [0.64] | FITS MIN. HOLE SIZE |
|-----------------|------------------|-----------------------------|-------------------------------|---------------------|
| CW              | DIP SOLDER       | .015" X .025" [0.38 X 0.64] | .125" [3.18]                  | .035" [0.89]        |
| CT              | DIP SOLDER       | .015" X .025" [0.38 X 0.64] | .170" [4.32]                  | .035" [0.89]        |
| CS              | DIP SOLDER       | .025" [0.64] SQUARE         | .160" [4.06]                  | .040" [1.02]        |
| CM              | WIRE WRAP        | .025" [0.64] SQUARE         | .560" [14.20]                 | .040" [1.02]        |
| CA              | RIGHT ANGLE      | .025" [0.64] SQUARE         | .100" [2.54]                  | .043" [1.09]        |
| CB              | RIGHT ANGLE      | .025" [0.64] SQUARE         | .180" [4.57]                  | .043" [1.09]        |
| CC              | RIGHT ANGLE      | .025" [0.64] SQUARE         | .250" [6.35]                  | .043" [1.09]        |

#### HAIRPIN BELLOWS



(CW, CT, CS, CM)

#### RIGHT ANGLE



(CA, CB, CC, TA, TB, TM, KA, KE, KU, KJ)

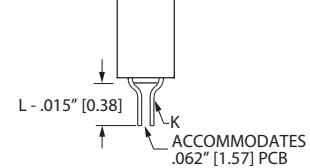
| LOOP BELLOWS | TERMINATION TYPE | POST CROSS SECTION K | POST LENGTH L<br>.025" [0.64] | FITS MIN. HOLE SIZE |
|--------------|------------------|----------------------|-------------------------------|---------------------|
| TK,CK        | DIP SOLDER       | .025" [0.64] ROUND   | .190" [4.83]                  | .033" [0.84]        |
| RS           | DIP SOLDER       | .025" [0.64] SQUARE  | .190" [4.83]                  | .040" [1.02]        |
| RM           | WIRE WRAP        | .025" [0.64] SQUARE  | .560" [14.20]                 | .040" [1.02]        |
| TA           | RIGHT ANGLE      | .025" [0.64] SQUARE  | .100" [2.54]                  | .043" [1.09]        |
| TB           | RIGHT ANGLE      | .025" [0.64] SQUARE  | .180" [4.57]                  | .043" [1.09]        |
| TM           | RIGHT ANGLE      | .025" [0.64] SQUARE  | .250" [6.35]                  | .043" [1.09]        |

#### LOOP BELLOWS



(TK, CK, RS, RM)

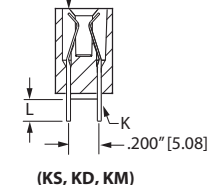
#### HAIRPIN or LOOP CARD EXTENDER



(CT, CS, CM, TK, CK, RS, RM)  
Example P/N: EBM10DCSN-S288  
(Requires -S288 Modification Code)

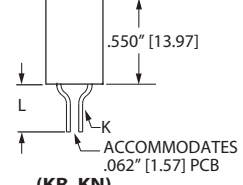
| CANTILEVER | TERMINATION TYPE | POST CROSS SECTION K | POST LENGTH L<br>.025" [0.64] | FITS MIN. HOLE SIZE |
|------------|------------------|----------------------|-------------------------------|---------------------|
| KS         | DIP SOLDER       | .025" [0.64] SQUARE  | .190" [4.83]                  | .040" [1.02]        |
| KD         | DIP SOLDER       | .025" [0.64] SQUARE  | .160" [4.06]                  | .043" [1.09]        |
| KM         | WIRE WRAP        | .025" [0.64] SQUARE  | .560" [14.20]                 | .040" [1.02]        |
| *KA        | RIGHT ANGLE      | .025" [0.64] SQUARE  | .100" [2.54]                  | .043" [1.09]        |
| *KE        | RIGHT ANGLE      | .025" [0.64] SQUARE  | .180" [4.57]                  | .043" [1.09]        |
| *KU        | RIGHT ANGLE      | .025" [0.64] SQUARE  | .250" [6.35]                  | .043" [1.09]        |
| *KJ        | RIGHT ANGLE      | .025" [0.64] SQUARE  | .500" [12.70]                 | .043" [1.09]        |
| *KR        | CARD EXTENDER    | .025" [0.64] SQUARE  | .235" [5.97]                  | N/A                 |
| *KN        | CARD EXTENDER    | .025" [0.64] SQUARE  | .605" [15.37]                 | N/A                 |

#### CANTILEVER



(KS, KD, KM)

#### CANTILEVER CARD EXTENDER



(KR, KN)  
Example P/N: EBM10DKRN  
(-S288 Not required)

\* KA, KE, KJ, KR, KN have no standoffs, unless requested.

### MOUNTING STYLE





### .156" [3.96 mm] Contact Centers, .610" [15.49 mm] Insulator Height, Dip Solder/Wire Wrap/Right Angle/Card Extender

#### PART NUMBER OPTIONS

##### MATERIALS (INSULATOR/CONTACT)

E = PBT/Phosphor Bronze (Standard)  
R = PPS/Phosphor Bronze  
G = PA9T/Phosphor Bronze  
H = PBT/ Beryllium Copper  
A = PPS/Beryllium Copper  
J = PA9T/Beryllium Copper  
(Consult factory for other materials.)  
Refer to Page 7 for Operating/Processing Temperatures

##### CONTACT FINISH - RoHS Compliant

All platings are Lead Free and have .000050" Nickel underplate

| Contact Surface              | Termination              |
|------------------------------|--------------------------|
| B = .000010" Gold            | .000100" Pure Tin, Matte |
| C = .000030" Gold            | .000100" Pure Tin, Matte |
| G = .000010" Gold            | .000005" Gold            |
| Y = .000030" Gold            | .000005" Gold            |
| Contact Surface              | Overall Plating          |
| S = .000010" Gold            | .000010" Gold            |
| M = .000030" Gold            | .000010" Gold            |
| E = .000100" Pure Tin, Matte | .000100" Pure Tin, Matte |

##### CONTACT CENTERS

M = .156" [3.96 mm]

##### NUMBER OF CONTACT POSITIONS

See Chart Below

##### READOUT (Opposite Page)

D = Dual  
H = Half Loaded

E B M 43 D CM H - Sxxx

##### MODIFICATION CODE (Consult Factory)

OMIT FOR STANDARD

-S189 = .200" [5.08 mm] Row Spacing on Right Angle  
-S288\* = Card Extender Accepts .062" [1.57 mm] PCB  
\* Not Required on KR or KN Terminations

##### MOUNTING STYLE (Opposite Page)

H = Clearance Holes  
I = Threaded Inserts  
S = Side Mounting  
N = No Mounting  
D, W = Flush Mounting  
T, X = Flush Mounting With Threaded Inserts

##### TERMINATION TYPE (Opposite Page)

##### Hairpin Bellows -

Available with B or C plating and Phosphor Bronze Only

CS = .025" [0.64 mm] Square Dip Solder  
CM = .025" [0.64 mm] Square Wire Wrap  
CA, CB, CC = .025" [0.64 mm] Square Right Angle  
CW, CT = .015" X .025" [0.38 mm X 0.64 mm] Dip Solder

##### Loop Bellows

RS = .025" [0.64 mm] Square Dip Solder  
CK, TK = .025" [0.64 mm] Round Dip Solder  
RM = .025" [0.64 mm] Square Wire Wrap  
TA, TB, TM = .025" [0.64 mm] Square Right Angle

##### Cantilever Bellows - Available in Y, B, or C Contact Finish Only

KS, KD = .025" [0.64 mm] Square Dip Solder  
KM = .025" [0.64 mm] Square Wire Wrap  
KA, KE, KU, KJ = .025" [0.64 mm] Square Right Angle  
KR, KN = .025" [0.64 mm] Square Card Extender

#### DIMENSIONS Dimensions in [ ] are in millimeters, all others are in inches.



Tolerances on non-critical dimensions may vary slightly due to shrinkage differential per insulator material; Consult factory.

| POSITIONS/<br>CONTACTS | INCHES |        |        |        |        |        | MILLIMETERS |        |        |        |        |        |
|------------------------|--------|--------|--------|--------|--------|--------|-------------|--------|--------|--------|--------|--------|
|                        | A±.008 | B±.008 | C±.015 | D±.010 | E±.020 | F±.015 | A±0.20      | B±0.20 | C±0.38 | D±0.25 | E±0.51 | F±0.38 |
| 06/12                  | 0.780  | 1.102  | 1.221  | 1.534  | 1.784  | 1.030  | 19.81       | 27.99  | 31.01  | 38.96  | 45.31  | 26.16  |
| 08/16                  | 1.092  | 1.414  | 1.533  | 1.846  | 2.096  | 1.342  | 27.74       | 35.92  | 38.94  | 46.89  | 53.24  | 34.09  |
| 10/20                  | 1.404  | 1.726  | 1.845  | 2.158  | 2.408  | 1.654  | 35.66       | 43.84  | 46.86  | 54.81  | 61.16  | 42.01  |
| 12/24                  | 1.716  | 2.038  | 2.157  | 2.470  | 2.720  | 1.966  | 43.59       | 51.77  | 54.79  | 62.74  | 69.09  | 49.94  |
| 15/30                  | 2.184  | 2.506  | 2.625  | 2.938  | 3.188  | 2.434  | 55.47       | 63.65  | 66.68  | 74.63  | 80.98  | 61.82  |
| 18/36                  | 2.652  | 2.974  | 3.093  | 3.406  | 3.656  | 2.902  | 67.36       | 75.54  | 78.56  | 86.51  | 92.86  | 73.71  |
| 20/40*                 | 2.964  | 3.286  | 3.405  | 3.718  | 3.968  | 3.214  | 75.29       | 83.46  | 86.49  | 94.44  | 100.79 | 81.64  |
| 22/44                  | 3.276  | 3.598  | 3.717  | 4.030  | 4.280  | 3.526  | 83.21       | 91.39  | 94.41  | 102.36 | 108.71 | 89.56  |
| 24/48                  | 3.588  | 3.910  | 4.029  | 4.342  | 4.592  | 3.838  | 91.14       | 99.31  | 102.34 | 110.29 | 116.64 | 97.49  |
| 25/50                  | 3.744  | 4.066  | 4.185  | 4.498  | 4.748  | 3.994  | 95.10       | 103.28 | 106.30 | 114.25 | 120.60 | 101.45 |
| 28/56                  | 4.212  | 4.534  | 4.653  | 4.966  | 5.216  | 4.462  | 106.98      | 115.16 | 118.19 | 126.14 | 132.49 | 113.33 |
| 30/60                  | 4.524  | 4.846  | 4.965  | 5.278  | 5.528  | 4.774  | 114.91      | 123.09 | 126.11 | 134.06 | 140.41 | 121.26 |
| 31/62                  | 4.680  | 5.002  | 5.121  | 5.434  | 5.684  | 4.930  | 118.87      | 127.05 | 130.07 | 138.02 | 144.37 | 125.22 |
| 36/72                  | 5.460  | 5.782  | 5.901  | 6.214  | 6.464  | 5.710  | 138.68      | 146.86 | 149.89 | 157.84 | 164.19 | 145.03 |
| 40/80                  | 6.084  | 6.406  | 6.525  | 6.838  | 7.088  | 6.334  | 154.53      | 162.71 | 165.74 | 173.69 | 180.04 | 160.88 |
| 43/86                  | 6.552  | 6.874  | 6.993  | 7.306  | 7.556  | 6.802  | 166.42      | 174.60 | 177.62 | 185.57 | 191.92 | 172.77 |
| 47/94                  | 7.176  | 7.498  | 7.617  | 7.930  | 8.180  | 7.426  | 182.27      | 190.45 | 193.47 | 201.42 | 207.77 | 188.62 |
| 50/100                 | 7.644  | 7.966  | 8.085  | 8.398  | 8.648  | 7.894  | 194.16      | 202.34 | 205.36 | 213.31 | 219.66 | 200.51 |

\* Consult factory for availability.