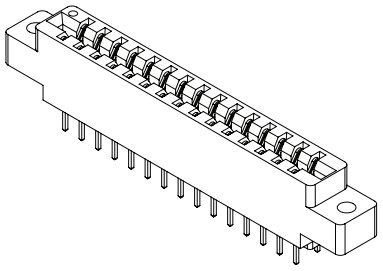
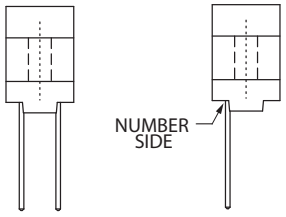
# .156" [3.96 mm] Contact Centers, .610" [15.49 mm] Insulator Height, Dip Solder/Wire Wrap/Right Angle/Card Extender



## SPECIFICATIONS

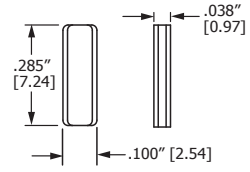
- Accommodates .062" ± .008" [1.57 mm ± 0.20 mm] PC board (See following pages for .093" ± .008" [2.36 mm ± 0.20 mm] and .125"± .008" [3.18 mm ± 0.20 mm] mating PCB)
- PBT, PPS or PA9T insulator
- Molded-in key available
- 3 Amps current rating for one contact energized
- 30 milli Ohms maximum at rated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

## READOUT




## POLARIZING KEY

**PLC-K1**

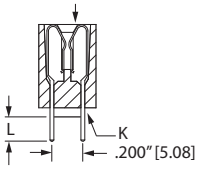



**KEY IN BETWEEN CONTACTS (ORDER SEPARATELY)**

## TERMINATION TYPE

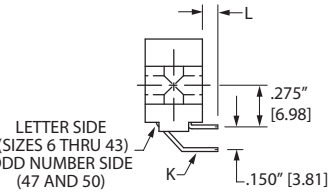
| HAIRPIN BELLOWS | TERMINATION TYPE | POST CROSS SECTION K | POST LENGTH L .025"[0.64] | FITS MIN. HOLE SIZE |
|---|---|---|---|---|
| CW | DIP SOLDER | .015" X .025" [0.38 X 0.64] | .125" [3.18] | .035" [0.89] |
| CT | DIP SOLDER | .015" X .025" [0.38 X 0.64] | .170" [4.32] | .035" [0.89] |
| CS | 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)**

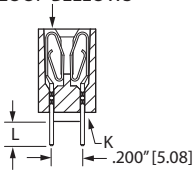
**RIGHT ANGLE**




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

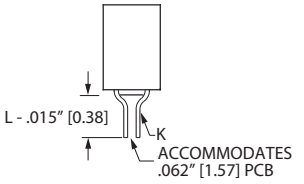
| LOOP BELLOWS | TERMINATION TYPE | POST CROSS SECTION K | POST LENGTH L .025"[0.64] | FITS MIN. HOLE SIZE |
|---|---|---|---|---|
| TK,CK | DIP SOLDER | .025" [0.64] ROUND | .190" [4.83] | .033" [0.84] |
| RS | DIP SOLDER | .025" [0.64] SQUARE | .190" [4.83] | .040" [1.02] |
| RM | WIRE WRAP | .025" [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**

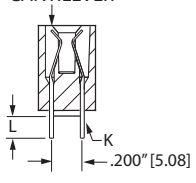



**(CT, CS, CM,TK, CK, RS,RM)**
**Example P/N: EBM10DCSN-S288**
**(Requires -S288 Modification Code)**

| CANTILEVER | TERMINATION TYPE | POST CROSS SECTION K | POST LENGTH L .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 |

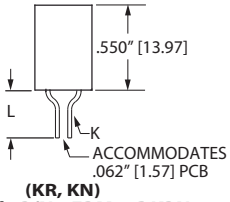
*** KA, KE, KJ, KR, KN have no standoffs, unless requested.**

CANTILEVER



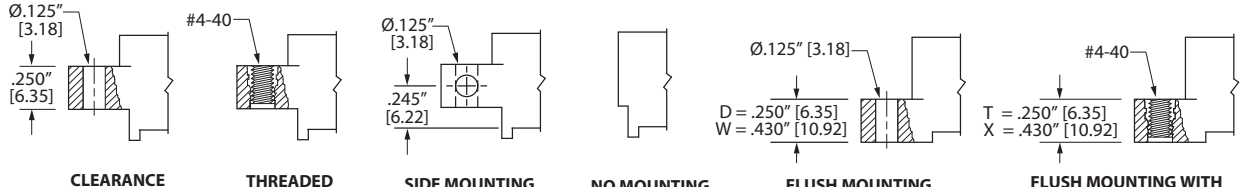

**(KS, KD, KM)**

**CANTILEVER CARD EXTENDER**




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

## 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

**E B M 43 D CM H - Sxxx**

**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

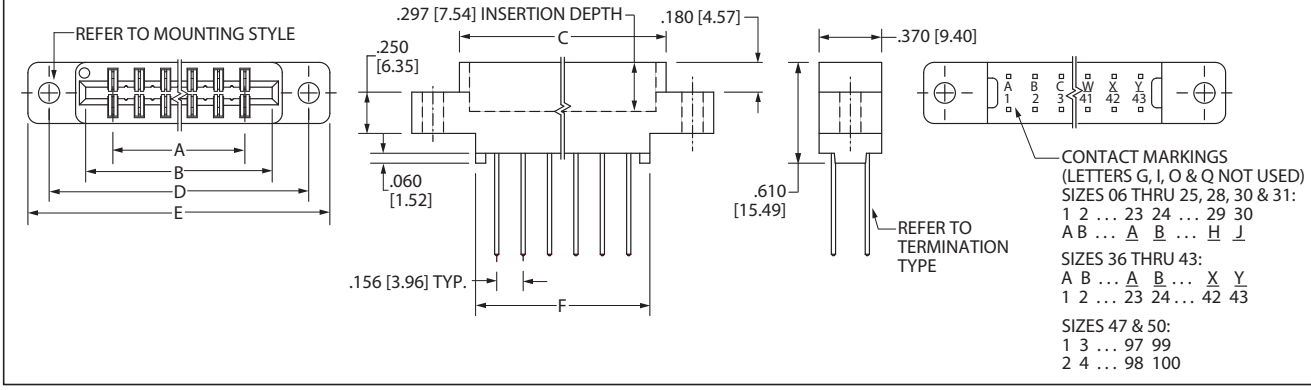
**READOUT (Opposite Page)**
D = Dual
H = Half Loaded

**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 very slightly due to shrinkage differential per insulator material; Consult factory.

| POSITIONS/ 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.