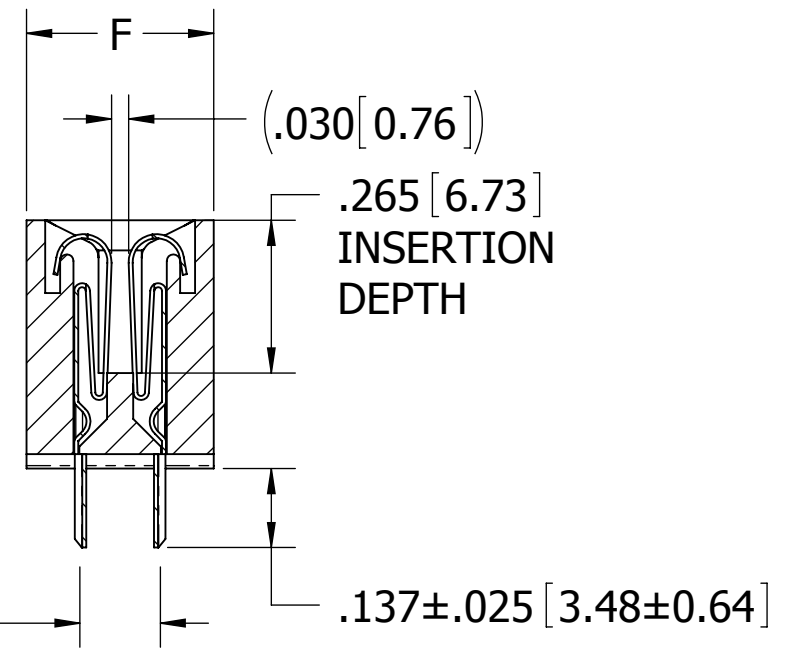
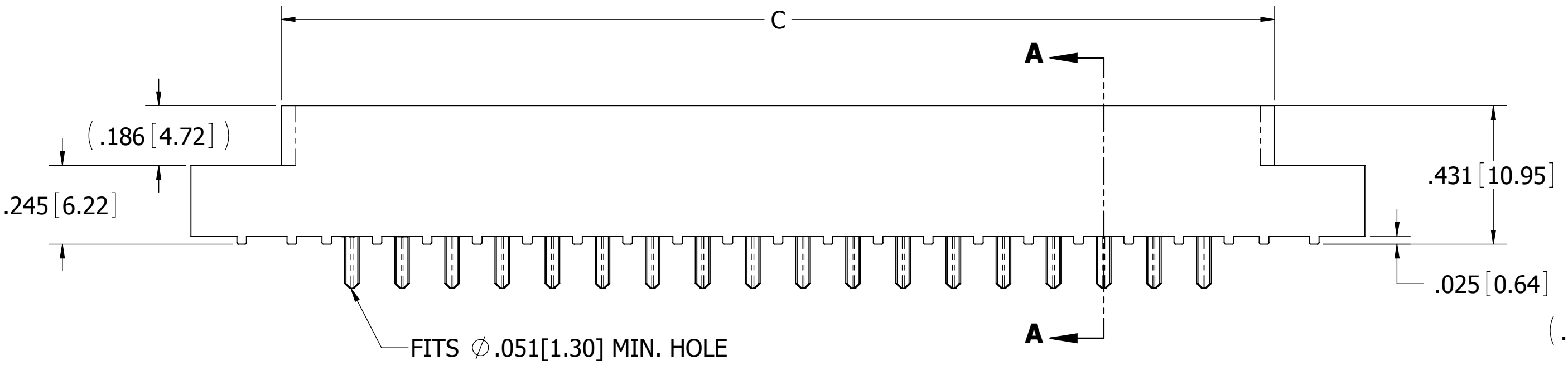
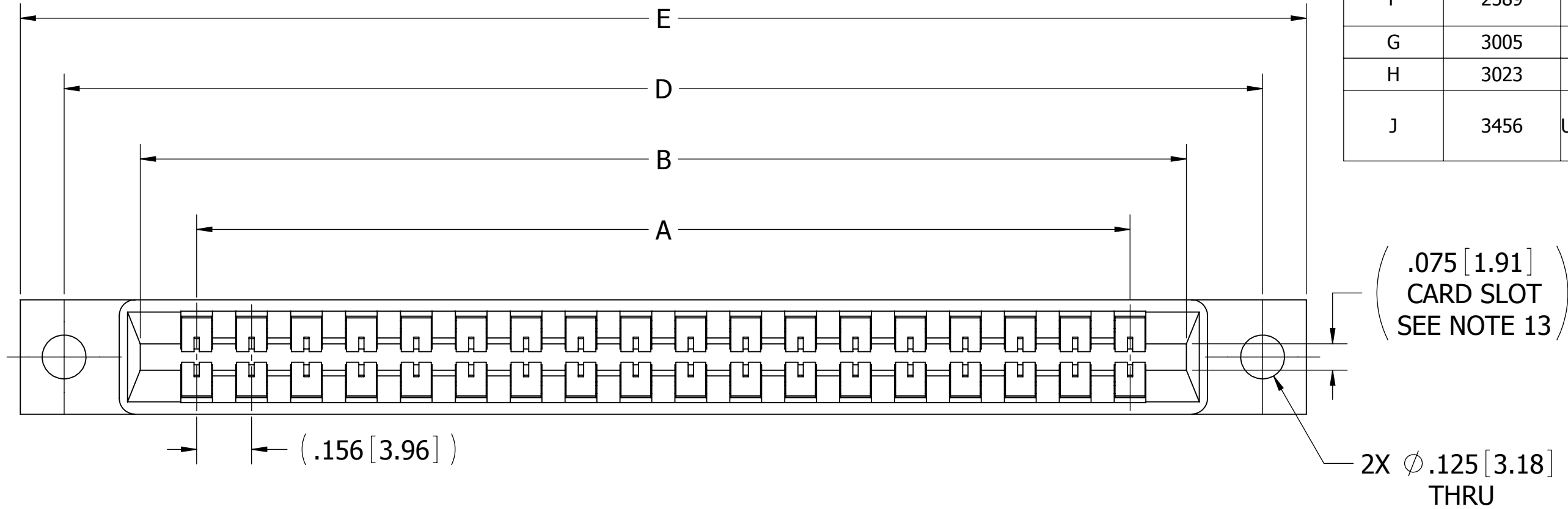


| REVISIONS |         |   |           |      |
|-----------|---------|---|-----------|------|
| REV.      | ECO. NO | DESCRIPTION   | DATE      | BY   |
| E         | 1980    | ADD 'A' MOUNTING  | 6/17/2009 | JH   |
| F         | 2589    | UPDATE TOP VIEW FOR 'I' & 'F' MTG OPTION, RS .140[3.56] (WAS .140[3.54]), SPECIFICATION NOTE, TOLERANCE FOR DIM 'F', DWG FORMAT | 4/27/2012 | JH   |
| G         | 3005    | ADD 'B' MOUNTING  | 6/26/2014 | JHSU |
| H         | 3023    | UPDATE DIMENSION TABLE WITH 'B' MOUNTING  | 7/24/2014 | JHSU |
| J         | 3456    | ADD 04 POSITION, UPDATE P/N IN TITLE BLOCK, UPDATE MATERIAL SECTION IN P/N CODING, UPDATE DWG FORMAT                            | 5/26/2016 | MG   |

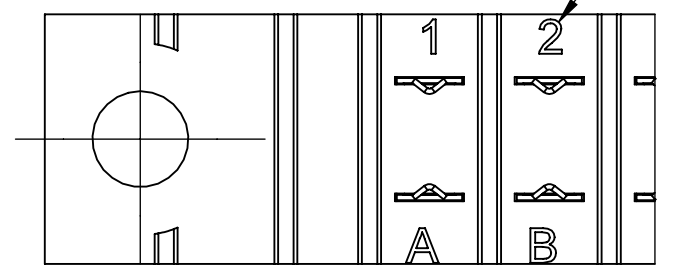


\_\_M\_\_DRTH-(S38, S81, S328)

CONTACT MARKINGS  
(LETTERS G, I, O, & Q NOT USED)

SIZE 02 THRU 25:  
1 2 3 ... 23 24 ...  
A B C ... AA BB ...

SIZE 28 THRU 44:  
1 2 3 ... 23 24 ...  
A B C ... A B ...



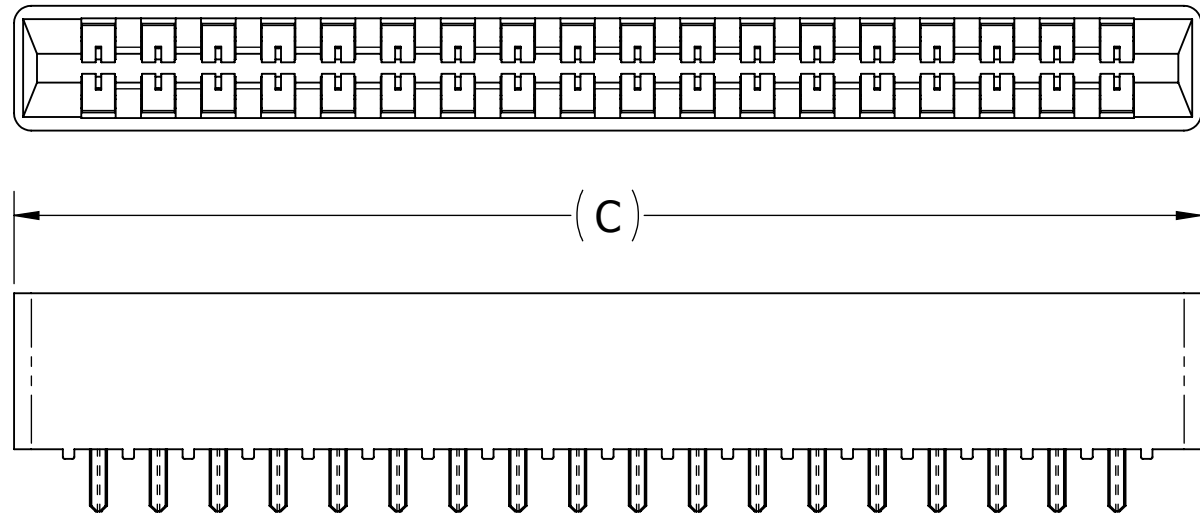
CONTACT ID  
SCALE 4 : 1

- NOTES:
- INSULATOR MATERIAL: SEE PART NUMBER CODING
  - CONTACT MATERIAL: SEE PART NUMBER CODING
  - PLATING: SEE PART NUMBER CODING
  - OPERATING TEMPERATURE: SEE PART NUMBER CODING
  - PROCESSING TEMP: SEE PART NUMBER CODING
  - UL FLAMMABILITY RATING: 94V-0
  - OPERATING VOLTAGE: 950 VAC
  - CURRENT RATING: 3 AMP
  - CONTACT RESISTANCE: 30 MILLI OHMS MAX
  - INSULATION RESISTANCE: 5000 MEGA OHMS
  - DURABILITY: 500 CYCLES MINIMUM
  - CONNECTOR IDENTIFICATION: THE PART SHALL BE MARKED WITH A PART NUMBER AND LOT CODE
  - BOARD THICKNESS ACCOMMODATED: .062 ± .008 [1.57 ± 0.20]
  - INSERTION FORCE: 16 OZ MAX PER CONTACT PAIR WHEN USING A .062 [1.57] TEST BLADE  
INTERNAL INSPECTION TO BE PER SULLINS WORK INSTRUCTION WI7.3-01
  - WITHDRAWAL FORCE: 1 OZ MIN PER CONTACT PAIR USING .062 [1.57] TEST BLADE
  - MODIFICATION: SEE PART NUMBER CODING

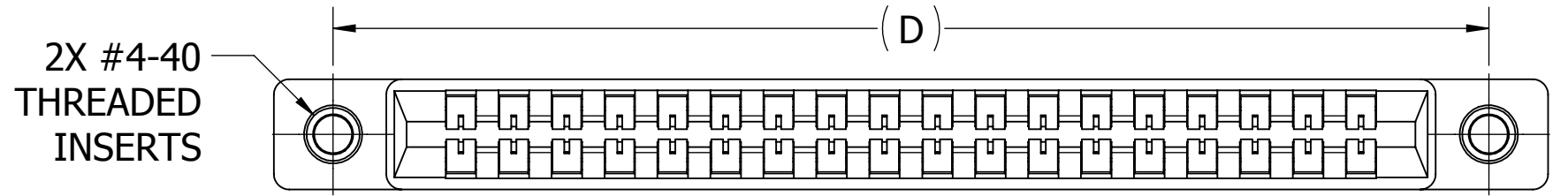


# CUSTOMER COPY

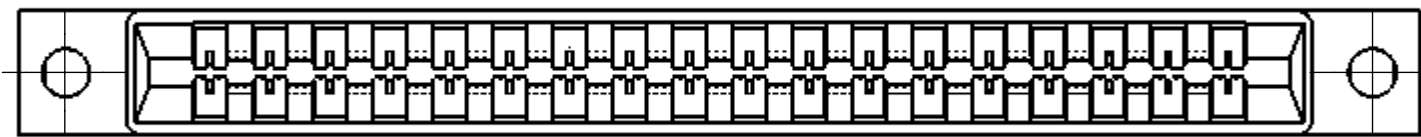
|  |   |          |              |                        |
|--|---|----------|--------------|------------------------|
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN INCHES [MM]   | DRAWN   | DATE     | NAME         |                        |
|  |   | 3/7/2008 | MNH          |                        |
| TOLERANCES:<br>ANGULAR: ± 1°<br><br>DECIMALS<br>.XX= ± .02 [.5]<br>.XXX= ± .005 [.13]<br>.XXXX= ± .0005 [.013] | <small>THE INFORMATION HEREIN CONTAINS PROPRIETARY INFORMATION OF SULLINS ELECTRONICS AND IS NOT TO BE REPRODUCED, USED OR DISCLOSED TO OTHERS FOR ANY PURPOSE EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY AN OFFICER OF SULLINS ELECTRONICS.</small> |          |              | TITLE                  |
|  |   |          |              | EDGE CARD, .156 CC, LP |
| PART NUMBER  |   |          |              |                        |
| __M__DRT_(OMIT,-S38,-S81,-S328)  |   |          |              |                        |
| SIZE   | CAGE CODE   | DWG. NO. | REV          |                        |
| C  | 54453   | C11077   | J            |                        |
| SCALE: 3:1   |   |          | SHEET 1 OF 3 |                        |



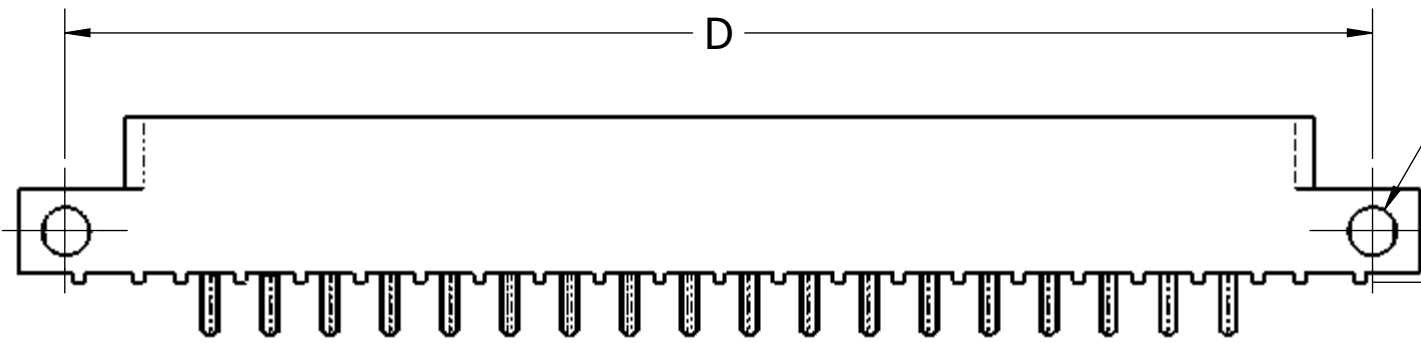
**--M\_DRTN-(S38, S81, S328)**



**--M\_DRTI-(S38, S81, S328)**



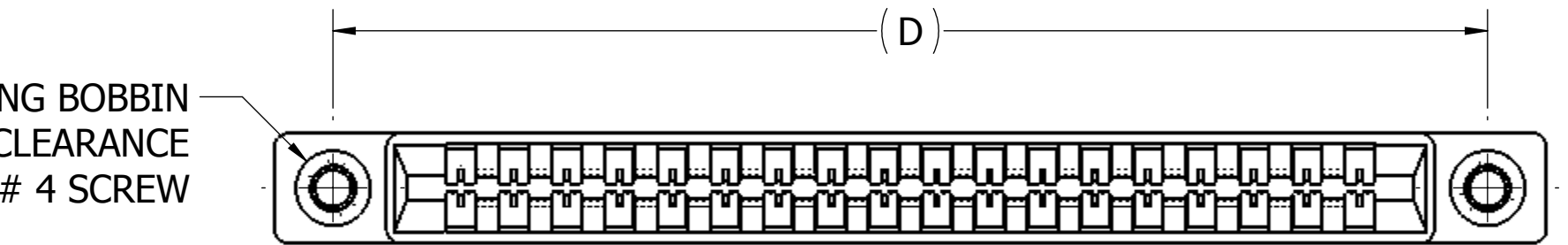
2X FLOATING BOBBIN  
 $\phi .116 [2.95]$  CLEARANCE  
 FOR # 4 SCREW



**--M\_DRTS-(S38, S81, S328)**

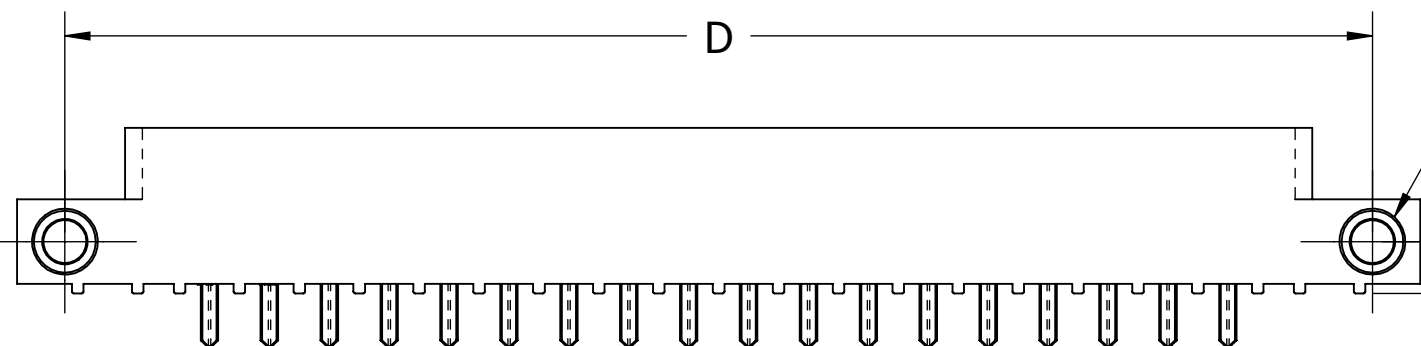
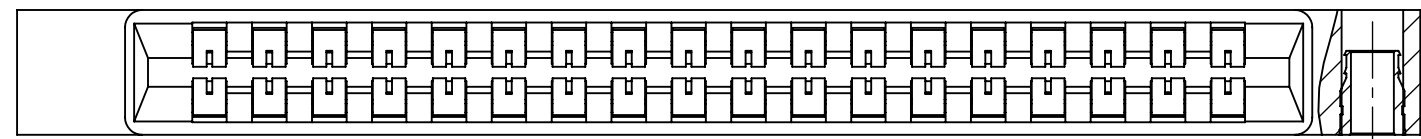
2X  $\phi .125 [3.18]$   
 THRU

$.135 [3.43]$



**--M\_DRTF-(S38, S81, S328)**

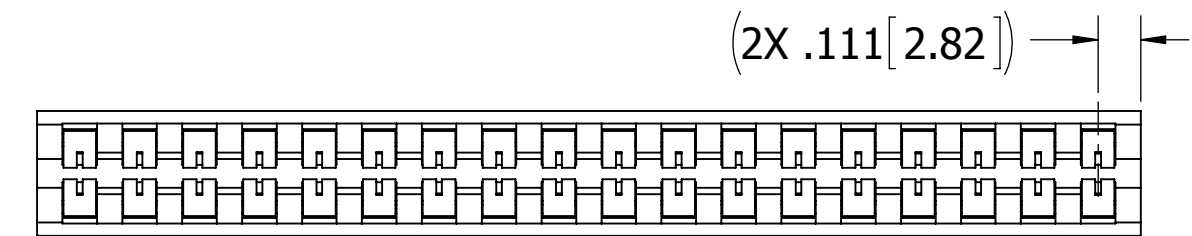
$(.280 [7.11])$



**M\_DRTA-(S38, S81, S328)  
 (CONSULT FACTORY FOR 'A' MOUNTING OPTION)**

2X #4-40  
 THREADED  
 INSERTS

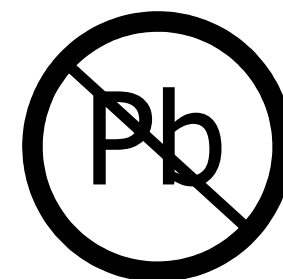
$.135 [3.43]$



$L \pm .015 [0.38]$   
 $(L = \text{DIM 'A'} + .222 [5.64])$

**--M\_DRTB-(S38, S81, S328)**

**CUSTOMER COPY**



RoHS COMPLIANT

|   |   |          |              |                       |
|---|---|----------|--------------|-----------------------|
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN INCHES [MM]  | DRAWN   | DATE     | NAME         |                       |
|   |   | 3/7/2008 | MNH          |                       |
| TOLERANCES:<br>ANGULAR: $\pm 1^\circ$<br>DECIMALS<br>.XX = $\pm .02 [ .5]$<br>.XXX = $\pm .005 [ .13]$<br>.XXXX = $\pm .0005 [ .013]$ | THE INFORMATION HEREIN CONTAINS<br>PROPRIETARY INFORMATION OF<br>SULLINS ELECTRONICS AND IS NOT<br>TO BE REPRODUCED, USED OR<br>DISCLOSED TO OTHERS FOR ANY<br>PURPOSE EXCEPT AS SPECIFICALLY<br>AUTHORIZED IN WRITING BY AN<br>OFFICER OF SULLINS ELECTRONICS. |          |              | TITLE                 |
|   |   |          |              | EDGECARD, .156 CC, LP |
| PART NUMBER   |   |          |              | REV                   |
| --M_DRT_(OMIT,-S38,-S81,-S328)  |   |          |              | J                     |
| SIZE  | CAGE CODE   | DWG. NO. |              |                       |
| C   | 54453   | C11077   |              |                       |
| SCALE: 2:1  |   |          | SHEET 2 OF 3 |                       |

| PART NUMBER | NO. OF POS. | A ± .008[0.20] |        | B ±.008[0.20] |        | C ±.015[0.38] |        | D ±.010[0.25]            |        | E ±.020[0.51] |        | E ±.020[0.51] |        | F +.005/-.015[+0.13/-0.38] |    |       |      |
|-------------|-------------|----------------|--------|---------------|--------|---------------|--------|--------------------------|--------|---------------|--------|---------------|--------|----------------------------|----|-------|------|
|             |             | IN             | MM     | IN            | MM     | IN            | MM     | IN                       | MM     | IN            | MM     | IN            | MM     | IN                         | MM |       |      |
| M02DRT      | 2           | 0.156          | 3.96   | 0.476         | 12.09  | 0.596         | 15.14  | 'N' OR 'B' MOUNTING ONLY |        |               |        |               |        |                            |    | 0.325 | 8.26 |
| M03DRT      | 3           | 0.312          | 7.92   | 0.632         | 16.05  | 0.752         | 19.10  |                          |        |               |        |               |        |                            |    |       |      |
| M04DRT      | 4           | 0.468          | 11.89  | 0.788         | 20.02  | 0.908         | 23.06  |                          |        |               |        |               |        |                            |    |       |      |
| M06DRT      | 6           | 0.780          | 19.81  | 1.100         | 27.94  | 1.220         | 30.99  |                          |        |               |        |               |        |                            |    |       |      |
| M08DRT      | 8           | 1.092          | 27.74  | 1.412         | 35.86  | 1.532         | 38.91  | 1.845                    | 46.86  | 2.094         | 53.19  | 2.194         | 55.73  |                            |    |       |      |
| M10DRT      | 10          | 1.404          | 35.66  | 1.724         | 43.79  | 1.844         | 46.84  | 2.157                    | 54.79  | 2.406         | 61.11  | 2.506         | 63.65  |                            |    |       |      |
| M11DRT      | 11          | 1.560          | 39.62  | 1.880         | 47.75  | 2.000         | 50.80  | 2.313                    | 58.75  | 2.562         | 65.07  | 2.662         | 67.61  |                            |    |       |      |
| M12DRT      | 12          | 1.716          | 43.59  | 2.036         | 51.71  | 2.156         | 54.76  | 2.469                    | 62.71  | 2.718         | 69.04  | 2.818         | 71.58  |                            |    |       |      |
| M15DRT      | 15          | 2.184          | 55.47  | 2.504         | 63.60  | 2.624         | 66.65  | 2.937                    | 74.60  | 3.186         | 80.92  | 3.286         | 83.46  |                            |    |       |      |
| M18DRT      | 18          | 2.652          | 67.36  | 2.972         | 75.49  | 3.092         | 78.54  | 3.405                    | 86.49  | 3.654         | 92.81  | 3.754         | 95.35  |                            |    |       |      |
| M22DRT      | 22          | 3.276          | 83.21  | 3.596         | 91.34  | 3.716         | 94.39  | 4.029                    | 102.34 | 4.278         | 108.66 | 4.378         | 111.20 |                            |    |       |      |
| M24DRT      | 24          | 3.588          | 91.14  | 3.908         | 99.26  | 4.028         | 102.31 | 4.341                    | 110.26 | 4.590         | 116.59 | 4.690         | 119.13 |                            |    |       |      |
| M25DRT      | 25          | 3.744          | 95.10  | 4.064         | 103.23 | 4.184         | 106.27 | 4.497                    | 114.22 | 4.746         | 120.55 | 4.846         | 123.09 |                            |    |       |      |
| M28DRT      | 28          | 4.212          | 106.98 | 4.532         | 115.11 | 4.652         | 118.16 | 4.965                    | 126.11 | 5.214         | 132.44 | 5.314         | 134.98 |                            |    |       |      |
| M36DRT      | 36          | 5.460          | 138.68 | 5.780         | 146.81 | 5.900         | 149.86 | 6.213                    | 157.81 | 6.462         | 164.13 | 6.562         | 166.67 |                            |    |       |      |
| M43DRT      | 43          | 6.552          | 166.42 | 6.872         | 174.55 | 6.992         | 177.60 | 7.305                    | 185.55 | 7.554         | 191.87 | 7.654         | 194.41 |                            |    |       |      |
| M44DRT      | 44          | 6.708          | 170.38 | 7.028         | 178.51 | 7.148         | 181.56 | 7.461                    | 189.51 | 7.710         | 195.83 | 7.810         | 198.37 |                            |    |       |      |

**PART NUMBER CODING**  
 -- M -- DRT --S --

**MATERIAL (INSULATOR/CONTACT)**

**E = BLUE PBT/ PHOSPHOR BRONZE**  
 OPERATING TEMP: -65°C TO +125°C  
 PROCESSING TEMP: WAVE/MANUAL SOLDERING ONLY

**R = GREEN PPS/ PHOSPHOR BRONZE**  
 OPERATING TEMP: -65°C TO +125°C  
 PROCESSING TEMP: 260°C MAX FOR 20 SECONDS

**G = BLACK PA9T/ PHOSPHOR BRONZE**  
 OPERATING TEMP: -65°C TO +125°C  
 PROCESSING TEMP: 260°C MAX FOR 20 SECONDS

**H = BLUE PBT/ BERYLLIUM COPPER**  
 OPERATING TEMP: -65°C TO +125°C  
 PROCESSING TEMP: WAVE/MANUAL SOLDERING ONLY

**A = GREEN PPS/ BERYLLIUM COPPER**  
 OPERATING TEMP: -65°C TO +150°C  
 PROCESSING TEMP: 260°C MAX FOR 20 SECONDS

**J = BLACK BLACK PA9T/ BERYLLIUM COPPER**  
 OPERATING TEMP: -65°C TO +150°C  
 PROCESSING TEMP: 260°C MAX FOR 20 SECONDS

**F = GREEN PPS/ SPINODAL (CONSULT FACTORY)**  
 OPERATING TEMP: -65°C TO +200°C  
 (CONSULT FACTORY FOR SPECIAL SOLDERING GUIDELINES)  
 AVAILABLE IN OVERALL GOLD ONLY (S OR M PLATING CODE)

**C = GREEN PPS/ BERYLLIUM NICKEL (CONSULT FACTORY)**  
 OPERATING TEMP: -65°C TO +200°C  
 PROCESSING TEMP: 260°C MAX FOR 20 SECONDS  
 AVAILABLE IN OVERALL GOLD ONLY (S OR M PLATING CODE)

**W = NATURAL BROWN PEEK/ BERYLLIUM NICKEL (CONSULT FACTORY)**  
 OPERATING TEMP: -65°C TO +250°C  
 PROCESSING TEMP: 260°C MAX FOR 20 SECONDS  
 AVAILABLE IN OVERALL GOLD ONLY (M PLATING CODE)

**MODIFICATION**  
 OMIT FOR STANDARD, EX: 'EBM22DRTH'  
 S38 = BLACK PBT (MATERIAL CODE E AND H ONLY)  
 S81 = GREEN PBT (MATERIAL CODE E AND H ONLY)  
 S328 = BROWN PPS (MATERIAL CODE R AND A ONLY)

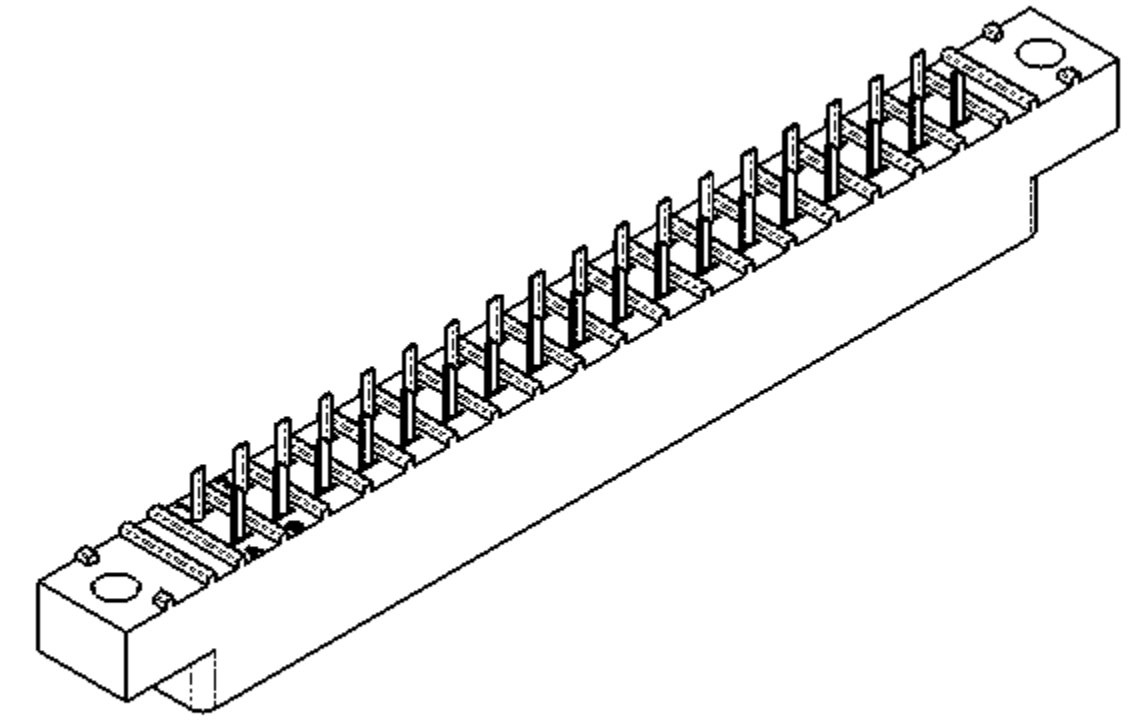
**MOUNTING STYLE**  
 H = .125" DIA. CLEARANCE HOLES  
 N = NO MOUNTING EARS  
 S = .125" DIA. SIDE MOUNTING  
 I = #4-40 THREADED INSERT  
 F = FLOATING BOBBIN  
 B = OPEN CARD SLOT  
 \*A = #4-40 THREADED INSERT SIDE MOUNTING  
 (\*CONSULT FACTORY FOR 'A' MOUNTING OPTION)

**NUMBER OF POSITIONS**  
 (CONTACTS PER ROW)

**PLATING**  
**ALL PLATINGS ARE LEAD FREE AND HAVE .000050" NICKEL UNDERPLATE**

|   |                          |
|---|--------------------------|
| CONTACT SURFACE                         | TERMINATION              |
| G = .000010" GOLD                       | .000005" GOLD            |
| Y = .000030" GOLD                       | .000005" GOLD            |
| B = .000010" GOLD                       | .000100" PURE TIN, MATTE |
| C = .000030" GOLD                       | .000100" PURE TIN, MATTE |
| **E = .000100" PURE TIN, MATTE, OVERALL |                          |
| S = .000010" GOLD OVERALL               |                          |
| M = .000030" GOLD                       | .000010" GOLD OVERALL    |

\*\* OVERALL TIN ONLY AVAILABLE ON MATERIAL CODES E, R AND G



**CUSTOMER COPY**

|   |  |          |              |                        |
|---|--|----------|--------------|------------------------|
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN INCHES [MM]  | DRAWN  | DATE     | NAME         |                        |
|   |  | 3/7/2008 | MNH          |                        |
| TOLERANCES:<br>ANGULAR: ± 1°<br>DECIMALS<br>.XX = ± .02 [.5]<br>.XXX = ± .005 [.13]<br>.XXXX = ± .0005 [.013] | THE INFORMATION HEREIN CONTAINS PROPRIETARY INFORMATION OF SULLINS ELECTRONICS AND IS NOT TO BE REPRODUCED, USED OR DISCLOSED TO OTHERS FOR ANY PURPOSE EXCEPT AS SPECIFICALLY AUTHORIZED IN WRITING BY AN OFFICER OF SULLINS ELECTRONICS. |          |              | TITLE                  |
|   |  |          |              | EDGE CARD, .156 CC, LP |
| PART NUMBER   |  |          |              | REV                    |
| -- M -- DRT (OMIT, -S38, -S81, -S328)   |  |          |              | J                      |
| SIZE  | CAGE CODE  | DWG. NO. |              |                        |
| C   | 54453  | C11077   |              |                        |
| SCALE: 3:1  |  |          | SHEET 3 OF 3 |                        |