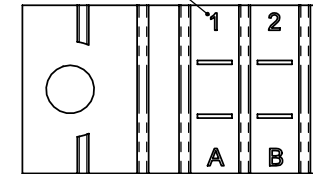


| REVISIONS |         |                                            |           |     |
|-----------|---------|--------------------------------------------|-----------|-----|
| REV.      | ECO. NO | DESCRIPTION                                | DATE      | BY  |
| A         | 1268    | INITIAL RELEASE                            | 2/3/07    | MV  |
| B         | 1390    | ADD CURRENT RATING TO F MATERIAL           | 6/18/2007 | MNH |
| C         | 1662    | UPDATE DRAWING FORMAT & PART NUMBER CODING | 4/23/2008 | VJ  |

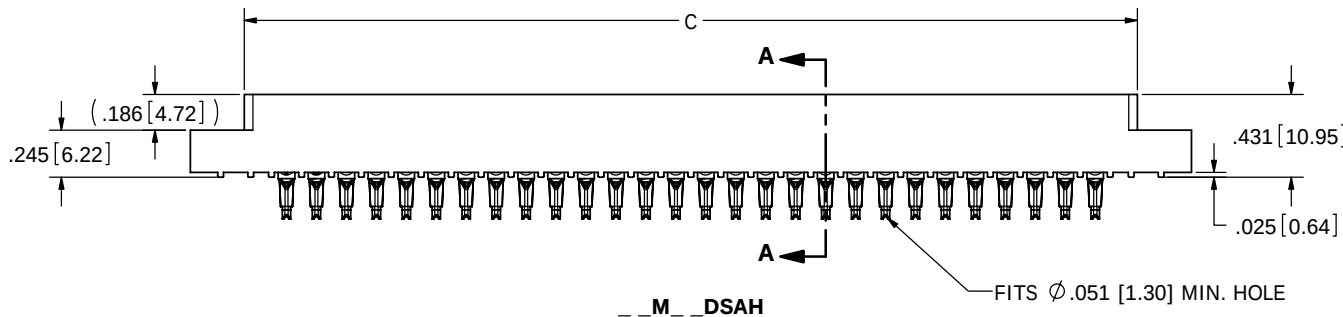
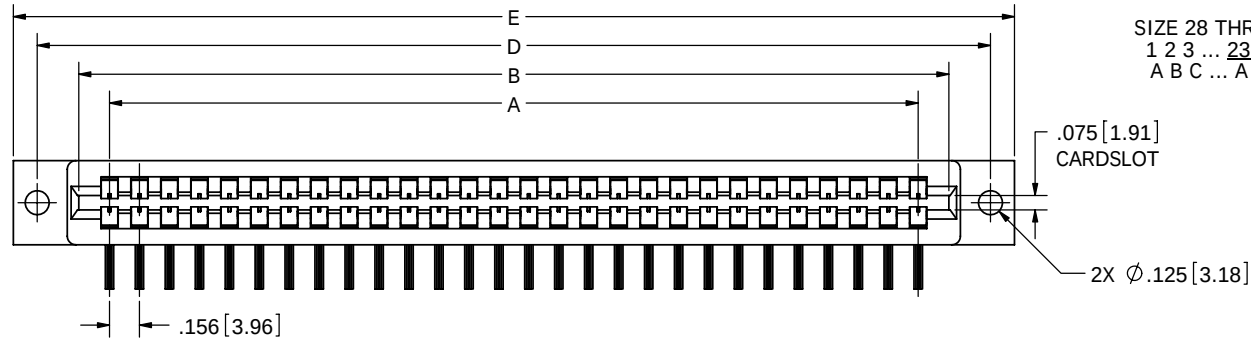
CONTACT MARKINGS  
(LETTERS G, I, O, & Q NOT USED)

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

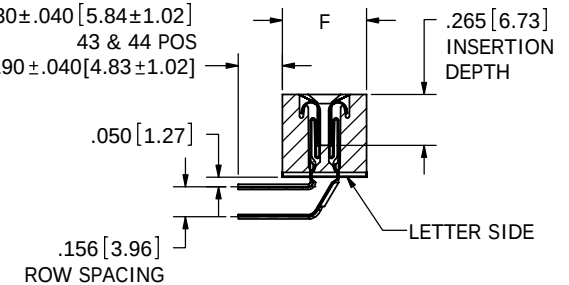
SIZE 28 THRU 44:  
1 2 3 ... 23 24 ...  
A B C ... A B ...



**CONTACT ID  
SCALE 3:1  
(PINS OMITTED FOR CLARITY)**



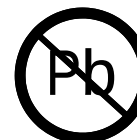
02 THRU 25 POS  
.270 ± .040 [6.86 ± 1.02]  
28 THRU 36 POS  
.230 ± .040 [5.84 ± 1.02]  
43 & 44 POS  
.190 ± .040 [4.83 ± 1.02]



**SECTION A-A**

**NOTES:**

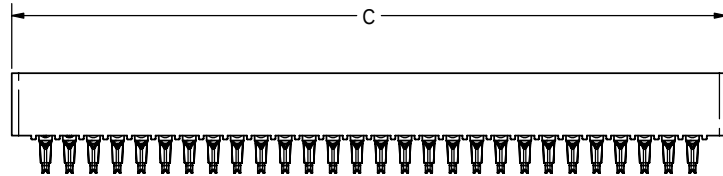
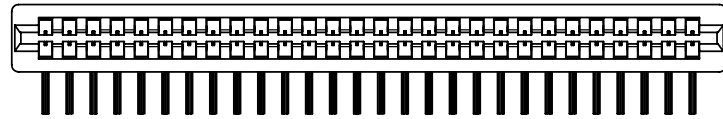
1. INSULATOR MATERIAL: SEE PART NUMBER CODING.
2. CONTACT MATERIAL: SEE PART NUMBER CODING.
3. PLATING: SEE PART NUMBER CODING.
4. TEMPERATURE: SEE PART NUMBER CODING.
5. PROCESSING TEMP: SEE PART NUMBER CODING.
6. UL FLAMMABILITY RATING: 94V-0.
7. VOLTAGE RATING: 1800 VDC MINIMUM AT SEA LEVEL.
8. CURRENT RATING: SEE PART NUMBER CODING.
9. VOLTAGE DROP: 30 MILLI VOLT AT RATED CURRENT.
10. INSULATION RESISTANCE: 5000 MEGA OHMS.
11. CONNECTOR IDENTIFICATION: THE PART SHALL BE MARKED WITH A PART NUMBER AND BARCODE.
12. BOARD THICKNESS ACCOMMODATED: .062 ± .008 [1.57 ± 0.20].
13. BOARD INSERTION FORCE: 16 OZ MAX PER CONTACT PAIR WHEN USING A .062 [1.57] TEST BLADE.  
INTERNAL INSPECTION TO BE PER SULLIN'S WORK INSTRUCTION W17.3-01.
14. BOARD WITHDRAWAL FORCE: 1 OUNCE MINIMUM PER CONTACT PAIR USING .062 [1.57] PCB.



**RoHS COMPLIANT**

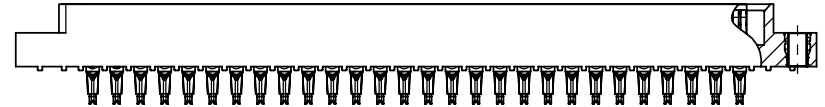
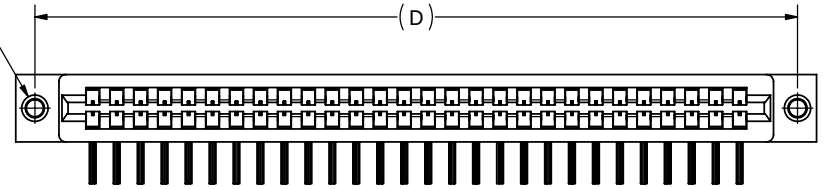
**CUSTOMER COPY**

|                                                                                                                                                                                                                                                                                                                 |                                        |                                                                                       |            |          |                                                                                       |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------|---------------------------------------------------------------------------------------|------------|----------|---------------------------------------------------------------------------------------|
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN INCHES[MM]<br>TOLERANCES:<br>ANGULAR: ± 30°<br>XX± .02 [508]<br>XXX± .005 [1270]<br>XXXX± .0005 [0127]<br>SURFACE FINISH: 63 Ra<br>REMOVE ALL BURRS AND SHARP EDGES .010 MAX<br><br>INTERPRET DIMENSIONS AND GEOMETRIC<br>TOLERANCING<br>PER: ANSI Y14.5M-1994 | DATE<br>2/3/2007                       |                                                                                       | NAME<br>MV |          |  |
|                                                                                                                                                                                                                                                                                                                 | DRAWN<br>2/3/2007<br>MV                |                                                                                       |            |          |                                                                                       |
|                                                                                                                                                                                                                                                                                                                 | DESCRIPTION<br>EDGE CARD, .156 CC, RAB |                                                                                       |            |          |                                                                                       |
|                                                                                                                                                                                                                                                                                                                 | PART NUMBER<br>M DSA                   |                                                                                       |            |          |                                                                                       |
| 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.                                                 |                                        |  |            |          |                                                                                       |
| SIZE<br>C                                                                                                                                                                                                                                                                                                       |                                        | DWG. NO.<br>C10890                                                                    |            | REV<br>C |                                                                                       |
| SCALE: 2:1                                                                                                                                                                                                                                                                                                      |                                        | SHEET 1 OF 3                                                                          |            |          |                                                                                       |



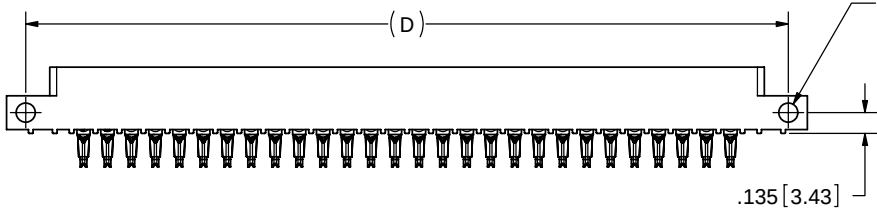
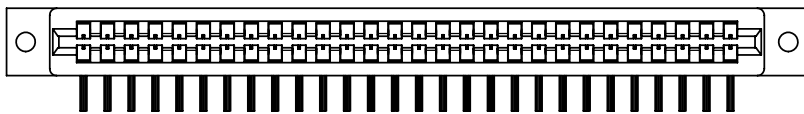
--M--DSAN

2X #4-40  
THREADED  
INSERT

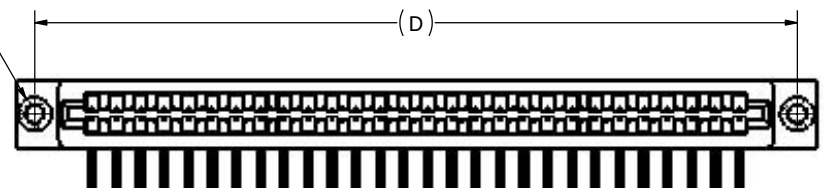


--M--DSAI

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

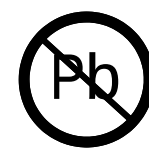


--M--DSAS

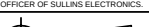


--M--DSAF

## CUSTOMER COPY



RoHS COMPLIANT

| <p>UNLESS OTHERWISE SPECIFIED:</p> <p>DIMENSIONS ARE IN INCHES[MM]</p> <p>TOLERANCES:</p> <p>ANGULAR: ± 30°</p> <p>.XX = ± .02 [ .508 ]</p> <p>.XXX = ± .005 [ .1270 ]</p> <p>XXXX = ± .0005 [ .0127 ]</p> <p>SURFACE FINISH: 63 Ra</p> <p>REMOVE ALL BURRS AND SHARP EDGES .010 MAX</p><br><p>INTERPRET DIMENSIONS AND GEOMETRIC TOLERANCING</p> <p>PER: ANSI Y14.5M-1994</p> | <table><tr><th>DATE</th><th>NAME</th></tr><tr><td>2/3/2007</td><td>MV</td></tr></table>                                                                                                                                                           | DATE     | NAME | 2/3/2007 | MV | <br><p>DESCRIPTION</p> <p>EDGE CARD, .156 CC, RAB</p> <p>PART NUMBER</p> <p>M DSA</p> <table><tr><th>SIZE</th><th>DWG. NO.</th><th>REV</th></tr><tr><td>C</td><td>C10890</td><td>C</td></tr></table> <p>SCALE: 2:1</p> <p>SHEET 2 OF 3</p> | SIZE | DWG. NO. | REV | C | C10890 | C |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------|------|----------|----|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------|----------|-----|---|--------|---|
|                                                                                                                                                                                                                                                                                                                                                                                | DATE                                                                                                                                                                                                                                              | NAME     |      |          |    |                                                                                                                                                                                                                                                                                                                                 |      |          |     |   |        |   |
|                                                                                                                                                                                                                                                                                                                                                                                | 2/3/2007                                                                                                                                                                                                                                          | MV       |      |          |    |                                                                                                                                                                                                                                                                                                                                 |      |          |     |   |        |   |
|                                                                                                                                                                                                                                                                                                                                                                                | SIZE                                                                                                                                                                                                                                              | DWG. NO. | REV  |          |    |                                                                                                                                                                                                                                                                                                                                 |      |          |     |   |        |   |
|                                                                                                                                                                                                                                                                                                                                                                                | C                                                                                                                                                                                                                                                 | C10890   | C    |          |    |                                                                                                                                                                                                                                                                                                                                 |      |          |     |   |        |   |
|                                                                                                                                                                                                                                                                                                                                                                                | <p>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.</p> |          |      |          |    |                                                                                                                                                                                                                                                                                                                                 |      |          |     |   |        |   |
|                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                              |          |      |          |    |                                                                                                                                                                                                                                                                                                                                 |      |          |     |   |        |   |
|                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                   |          |      |          |    |                                                                                                                                                                                                                                                                                                                                 |      |          |     |   |        |   |
|                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                   |          |      |          |    |                                                                                                                                                                                                                                                                                                                                 |      |          |     |   |        |   |
|                                                                                                                                                                                                                                                                                                                                                                                |                                                                                                                                                                                                                                                   |          |      |          |    |                                                                                                                                                                                                                                                                                                                                 |      |          |     |   |        |   |

|             |                |                |        |               |        |                |        |               |        |               |        | Only applies for<br>PPS/PEEK<br>insulators with<br>threaded inSArts<br>or floats |        |               |       |      |
|-------------|----------------|----------------|--------|---------------|--------|----------------|--------|---------------|--------|---------------|--------|----------------------------------------------------------------------------------|--------|---------------|-------|------|
| PART NUMBER | NO. OF<br>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[0.13] |       |      |
|             |                | IN             | MM     | IN            | MM     | IN             | MM     | IN            | MM     | IN            | MM     | IN                                                                               | MM     | IN            | MM    |      |
| M02DSAN     | 2              | 0.156          | 3.96   | 0.476         | 12.09  | 0.596          | 15.14  | "N" MOUNTING  |        |               |        |                                                                                  |        |               | 0.325 | 8.26 |
| M03DSAN     | 3              | 0.312          | 7.92   | 0.632         | 16.05  | 0.752          | 19.10  |               |        |               |        |                                                                                  |        |               |       |      |
| M06DSA      | 6              | 0.780          | 19.81  | 1.100         | 27.94  | 1.220          | 30.99  | 1.533         | 38.94  | 1.782         | 45.26  | 1.882                                                                            | 47.80  |               |       |      |
| M08DSA      | 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  |               |       |      |
| M10DSA      | 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  |               |       |      |
| M11DSA      | 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  |               |       |      |
| M12DSA      | 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  |               |       |      |
| M15DSA      | 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  |               |       |      |
| M18DSA      | 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  |               |       |      |
| M22DSA      | 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 |               |       |      |
| M24DSA      | 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 |               |       |      |
| M25DSA      | 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 |               |       |      |
| M28DSA      | 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 |               |       |      |
| M36DSA      | 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 | 0.438         | 11.13 |      |
| M43DSA      | 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 |               |       |      |
| M44DSA      | 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 | 0.500         | 12.70 |      |

PART NUMBER CODING

- M - DSA -

MATERIAL (INSULATOR/CONTACT)

- E = PBT/PHOSPHOR BRONZE**  
OPERATING TEMP: -65°C TO +125°C @ 3 AMPS PER CONTACT  
OPERATING TEMP: -65°C TO +21°C @ 5 AMPS PER CONTACT  
PROCESSING TEMP: 260°C FOR 10 SECS MAX
- R = PPS/PHOSPHOR BRONZE**  
OPERATING TEMP: -65°C TO +125°C  
PROCESSING TEMP: 260°C FOR 120 SECS MAX  
CURRENT RATING PER CONTACT: 5 AMPS
- G = PA9T/PHOSPHOR BRONZE**  
OPERATING TEMP: -65°C TO +125°C  
PROCESSING TEMP: 260°C FOR 120 SECS MAX  
CURRENT RATING PER CONTACT: 5 AMPS
- H = PBT/BERYLLIUM COPPER**  
OPERATING TEMP: -65°C TO +125°C @ 3 AMPS PER CONTACT  
OPERATING TEMP: -65°C TO +105°C @ 5 AMPS PER CONTACT  
PROCESSING TEMP: 260°C FOR 10 SECS MAX
- A = PPS/BERYLLIUM COPPER**  
OPERATING TEMP: -65°C TO +150°C  
PROCESSING TEMP: 260°C FOR 120 SECS MAX  
CURRENT RATING PER CONTACT: 5 AMPS
- J = PA9T/BERYLLIUM COPPER**  
OPERATING TEMP: -65°C TO +150°C  
PROCESSING TEMP: 260°C FOR 120 SECS MAX  
CURRENT RATING PER CONTACT: 5 AMPS
- F = PPS/SPINODAL (CONSULT FACTORY)**  
AVAILABLE IN OVERALL GOLD ONLY (S OR M PLATING CODE)  
OPERATING TEMP: -65°C TO +200°C  
PROCESSING TEMP: 260°C FOR 120 SECS MAX  
CURRENT RATING PER CONTACT: 3 AMPS
- C = PPS/BERYLLIUM COPPER (CONSULT FACTORY)**  
AVAILABLE IN OVERALL GOLD ONLY (S OR M PLATING CODE)  
OPERATING TEMP: -65°C TO +200°C @ 2 AMPS PER CONTACT  
OPERATING TEMP: -65°C TO +173°C @ 3 AMPS PER CONTACT  
PROCESSING TEMP: 260°C FOR 120 SECS MAX
- W = PEEK/BERYLLIUM COPPER (CONSULT FACTORY)**  
AVAILABLE IN OVERALL GOLD ONLY (S OR M PLATING CODE)  
OPERATING TEMP: -65°C TO +250°C  
CURRENT RATING PER CONTACT: 3 AMPS  
(CONSULT FACTORY FOR OTHER MATERIALS)

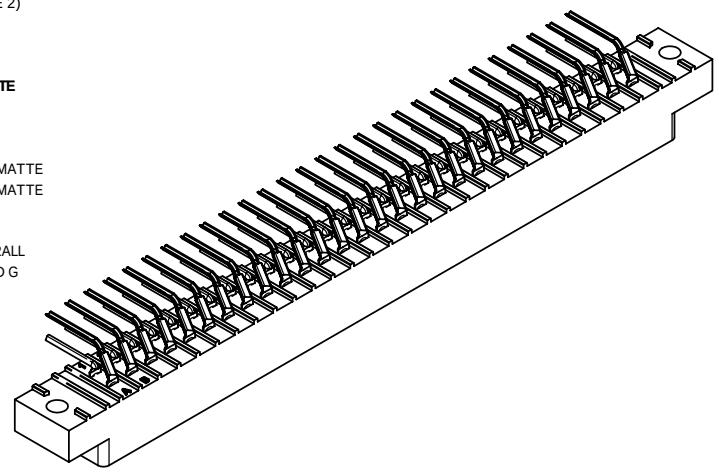
NUMBER OF POSITIONS  
(CONTACTS PER ROW)

PLATING

- ALL PLATINGS ARE LEAD FREE AND HAVE .000050" NICKEL UNDERPLATE
- CONTACT SURFACE
- G = .000010" GOLD  
Y = .000030" GOLD  
B = .000010" GOLD  
C = .000030" GOLD
- \*E = .000100" PURE TIN, MATTE, OVERALL  
S = .000010" GOLD OVERALL  
M = .000030" GOLD
- \*\* OVERALL TIN ONLY AVAILABLE ON MATERIAL CODES E, R AND G

MOUNTING STYLE

- H = .125" DIA. CLEARANCE HOLES (PAGE 1)  
N = NO MOUNTING EARS (PAGE 2)  
S = .125" DIA. SIDE MOUNTING (PAGE 2)  
I = #4-40 THREADED INSERT (PAGE 2)  
F = FLOATING BOBBIN (PAGE 2)



CUSTOMER COPY



RoHS COMPLIANT

|                                                                                                                                                                                                                                                                 |  |                                        |            |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------------------|------------|
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN INCHES[MM]<br>TOLERANCES:<br>ANGULAR: ± 30°<br>.XX±.02 [508]<br>.XXX±.005 [127]<br>XXXX±.0005 [0.127]<br>SURFACE FINISH: 63 Ra<br>REMOVE ALL BURRS AND SHARP EDGES .010 MAX                                    |  | DATE<br>2/3/2007                       | NAME<br>MV |
| 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. |  | DESCRIPTION<br>EDGE CARD, .156 CC, RAB |            |
| PART NUMBER<br>M DSA                                                                                                                                                                                                                                            |  | REV<br>C                               |            |
| SIZE<br>C                                                                                                                                                                                                                                                       |  | DWG. NO.<br>C10890                     |            |
| TOLERANCING<br>PER: ANSI Y14.5M-1994                                                                                                                                                                                                                            |  | SCALE: 2:1                             |            |
| INTERPRET DIMENSIONS AND GEOMETRIC<br>TOLERANCING                                                                                                                                                                                                               |  | SHEET 3 OF 3                           |            |