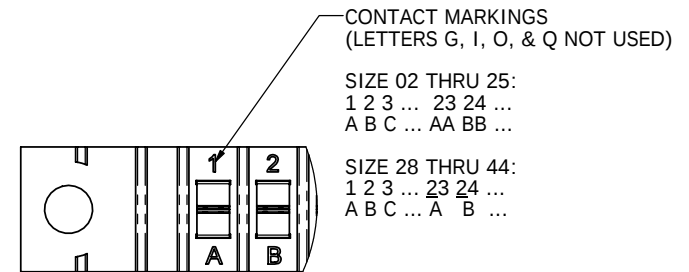
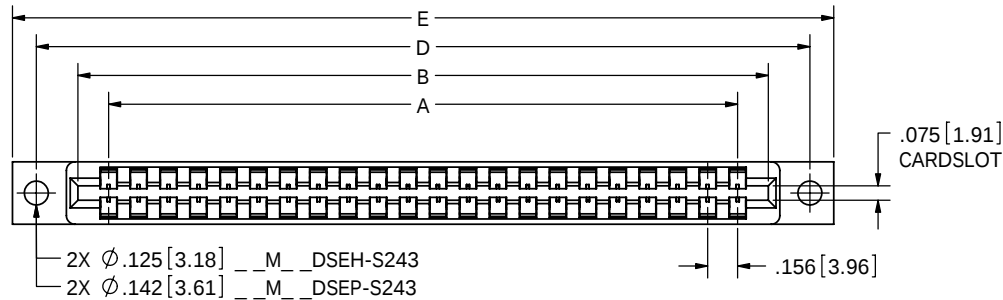
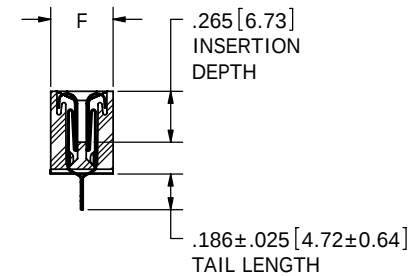


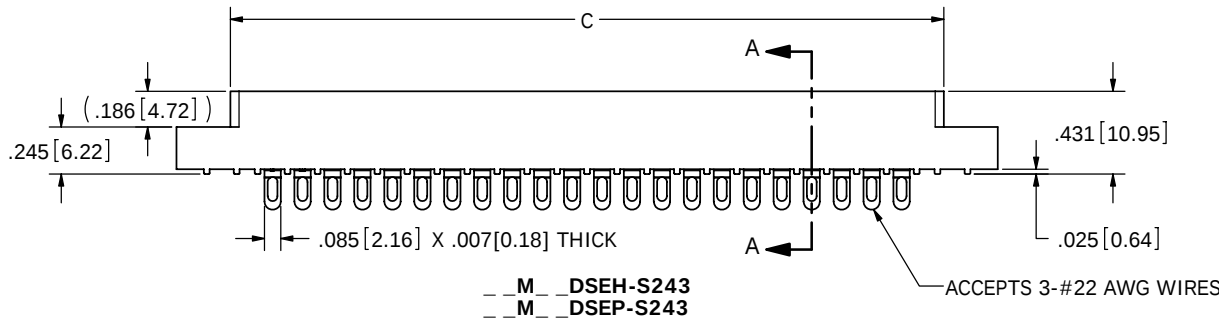
| REVISIONS |         |                                                                                                   |            |     |
|-----------|---------|---------------------------------------------------------------------------------------------------|------------|-----|
| REV.      | ECO. NO | DESCRIPTION                                                                                       | DATE       | BY  |
| A         | 604     | INITIAL RELEASE                                                                                   | 05/02/2005 | TT  |
| B         | 898     | ADDED WIDTH DIMENSION                                                                             | 1/12/2006  | HT  |
| C         | 1375    | UPDATED FORMAT. ADDED ALL TABULATIONS. CORRECTED S# CALL OUT FROM S13 TO S243 IN TABULATION BLOCK | 6/6/2007   | MNH |
| D         | 1390    | ADD CURRENT RATING TO F MATERIAL                                                                  | 6/18/2007  | MNH |
| E         | 1656    | ADDED 'P' MOUNTING                                                                                | 4/8/2008   | MNH |
| F         | 1662    | UPDATE DRAWING FORMAT & PART NUMBER CODING                                                        | 4/18/2008  | VJ  |



CONTACT ID  
SCALE 4:1



SECTION A-A



M\_DSEH-S243  
M\_DSEP-S243

#### 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.
15. MODIFICATION: CRIMP BOTH ROWS TO CENTER.



RoHS COMPLIANT

## CUSTOMER COPY

| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN INCHES[MM]<br>TOLERANCES:<br>ANGULAR: ± 1°<br>.XX=± .02 [508]<br>.XXX=± .005 [1270]<br>.XXXX=± .0005 [0127]<br>PARENTHETICAL INFORMATION IS FOR REFERENCE ONLY<br><br>INTERPRET DIMENSIONS AND GEOMETRIC TOLERANCING PER: ANSI Y14.5-1984 | <table><tr><th>DATE</th><th>NAME</th></tr><tr><td>8/2/2006</td><td>HT</td></tr></table> |      | DATE | NAME                                                                                                                                                                                                                                       | 8/2/2006                                                                              | HT | <table><tr><td colspan="2"><b>SULLINS ELECTRONICS</b></td></tr><tr><td colspan="2">DESCRIPTION<br/>EDGE CARD, .156 CC, LP</td></tr><tr><td colspan="2">PART NUMBER<br/>M DSE -S243</td></tr><tr><td>SIZE<br/>C</td><td>DWG. NO.<br/>C10454</td></tr><tr><td colspan="2">SCALE: 2:1</td></tr><tr><td colspan="2">SHEET 1 OF 3</td></tr></table> |  | <b>SULLINS ELECTRONICS</b> |  | DESCRIPTION<br>EDGE CARD, .156 CC, LP |  | PART NUMBER<br>M DSE -S243 |  | SIZE<br>C | DWG. NO.<br>C10454 | SCALE: 2:1 |  | SHEET 1 OF 3 |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|----|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|----------------------------|--|---------------------------------------|--|----------------------------|--|-----------|--------------------|------------|--|--------------|--|
|                                                                                                                                                                                                                                                                                            | DATE                                                                                    | NAME |      |                                                                                                                                                                                                                                            |                                                                                       |    |                                                                                                                                                                                                                                                                                                                                                |  |                            |  |                                       |  |                            |  |           |                    |            |  |              |  |
|                                                                                                                                                                                                                                                                                            | 8/2/2006                                                                                | HT   |      |                                                                                                                                                                                                                                            |                                                                                       |    |                                                                                                                                                                                                                                                                                                                                                |  |                            |  |                                       |  |                            |  |           |                    |            |  |              |  |
|                                                                                                                                                                                                                                                                                            | <b>SULLINS ELECTRONICS</b>                                                              |      |      |                                                                                                                                                                                                                                            |                                                                                       |    |                                                                                                                                                                                                                                                                                                                                                |  |                            |  |                                       |  |                            |  |           |                    |            |  |              |  |
| DESCRIPTION<br>EDGE CARD, .156 CC, LP                                                                                                                                                                                                                                                      |                                                                                         |      |      |                                                                                                                                                                                                                                            |                                                                                       |    |                                                                                                                                                                                                                                                                                                                                                |  |                            |  |                                       |  |                            |  |           |                    |            |  |              |  |
| PART NUMBER<br>M DSE -S243                                                                                                                                                                                                                                                                 |                                                                                         |      |      |                                                                                                                                                                                                                                            |                                                                                       |    |                                                                                                                                                                                                                                                                                                                                                |  |                            |  |                                       |  |                            |  |           |                    |            |  |              |  |
| SIZE<br>C                                                                                                                                                                                                                                                                                  | DWG. NO.<br>C10454                                                                      |      |      |                                                                                                                                                                                                                                            |                                                                                       |    |                                                                                                                                                                                                                                                                                                                                                |  |                            |  |                                       |  |                            |  |           |                    |            |  |              |  |
| SCALE: 2:1                                                                                                                                                                                                                                                                                 |                                                                                         |      |      |                                                                                                                                                                                                                                            |                                                                                       |    |                                                                                                                                                                                                                                                                                                                                                |  |                            |  |                                       |  |                            |  |           |                    |            |  |              |  |
| SHEET 1 OF 3                                                                                                                                                                                                                                                                               |                                                                                         |      |      |                                                                                                                                                                                                                                            |                                                                                       |    |                                                                                                                                                                                                                                                                                                                                                |  |                            |  |                                       |  |                            |  |           |                    |            |  |              |  |
| <table><tr><td colspan="4">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.</td></tr></table>    |                                                                                         |      |      | 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. |                                                                                       |    |                                                                                                                                                                                                                                                                                                                                                |  |                            |  |                                       |  |                            |  |           |                    |            |  |              |  |
| 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.                                                 |                                                                                         |      |      |                                                                                                                                                                                                                                            |                                                                                       |    |                                                                                                                                                                                                                                                                                                                                                |  |                            |  |                                       |  |                            |  |           |                    |            |  |              |  |
| <table><tr><td></td><td></td><td colspan="2"></td></tr></table>                                                  |                                                                                         |      |      |                                                                                                                                                       |  |    |                                                                                                                                                                                                                                                                                                                                                |  |                            |  |                                       |  |                            |  |           |                    |            |  |              |  |
|                                                                                                                                                                                                       |    |      |      |                                                                                                                                                                                                                                            |                                                                                       |    |                                                                                                                                                                                                                                                                                                                                                |  |                            |  |                                       |  |                            |  |           |                    |            |  |              |  |
|                                                                                                                                                                                                                                                                                            |                                                                                         |      |      |                                                                                                                                                                                                                                            |                                                                                       |    |                                                                                                                                                                                                                                                                                                                                                |  |                            |  |                                       |  |                            |  |           |                    |            |  |              |  |

8

7

6

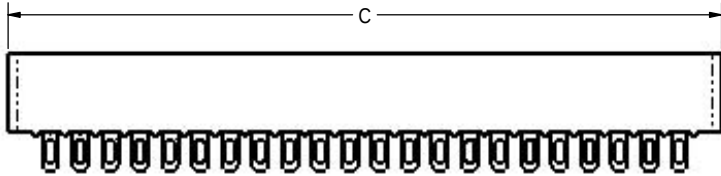
5

4

3

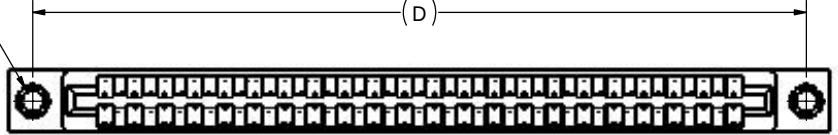
2

1



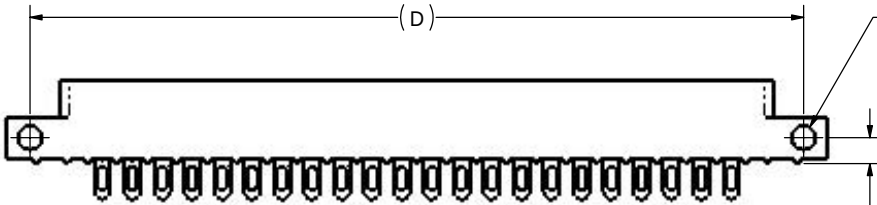
\_M\_\_DSEN-S243

2X #4-40  
THREADED  
INSERT



\_M\_\_DSEI-S243

2X FLOATING BOBBIN  
Ø.116[2.95] CLEARANCE  
FOR # 4 SCREW



\_M\_\_DSES-S243

4X Ø.125 [3.18]

.280 [7.11]



\_M\_\_DSEF-S243

## CUSTOMER COPY



RoHS COMPLIANT

|                                                                                                                                                                                                                                                                                                  |  |  |                                       |                        |            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|---------------------------------------|------------------------|------------|
| UNLESS OTHERWISE SPECIFIED:<br>DIMENSIONS ARE IN INCHES[MM]<br>TOLERANCES:<br>ANGULAR: ± 1°<br>XX= ± .02 [508]<br>.XXX= ± .005 [1270]<br>.XXXX= ± .0005 [0127]<br>PARENTHEICAL INFORMATION IS FOR<br>REFERENCE ONLY<br>INTERPRET DIMENSIONS AND GEOMETRIC<br>TOLERANCING<br>PER: ANSI Y14.5-1984 |  |  | DRAWN<br>8/2/2006<br>HT               | DATE<br>8/2/2006<br>HT | NAME<br>HT |
| 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, LP |                        |            |
| PART NUMBER<br>M_DSE-S243                                                                                                                                                                                                                                                                        |  |  | SIZE<br>C                             |                        |            |
| DWG. NO.<br>C10454                                                                                                                                                                                                                                                                               |  |  | REV<br>F                              |                        |            |
| SCALE: 2:1                                                                                                                                                                                                                                                                                       |  |  | SHEET 2 OF 3                          |                        |            |

|              |                |                |        |                |        |                |        |                |        | Only applies for<br>PPS/PEEK<br>insulators with<br>threaded inserts<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    |
| M02DSEN-S243 | 2              | 0.156          | 3.96   | 0.476          | 12.09  | 0.596          | 15.14  | "N" MOUNTING   |        |                                                                                  |        |                |        | 0.325          | 8.26  |
| M03DSEN-S243 | 3              | 0.312          | 7.92   | 0.632          | 16.05  | 0.752          | 19.10  |                |        |                                                                                  |        |                |        |                |       |
| M06DSE -S243 | 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  |                |       |
| M08DSE -S243 | 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  |                |       |
| M10DSE -S243 | 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  |                |       |
| M11DSE -S243 | 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  |                |       |
| M12DSE -S243 | 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  |                |       |
| M15DSE -S243 | 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  |                |       |
| M18DSE -S243 | 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  |                |       |
| M22DSE -S243 | 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 |                |       |
| M24DSE -S243 | 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 |                |       |
| M25DSE -S243 | 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 |                |       |
| M28DSE -S243 | 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 | 0.438          | 11.13 |
| M36DSE -S243 | 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 |                |       |
| M43DSE -S243 | 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 | 0.500          | 12.70 |
| M44DSE -S243 | 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 -- DSE -- S243

↑ ↑ ↑

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)

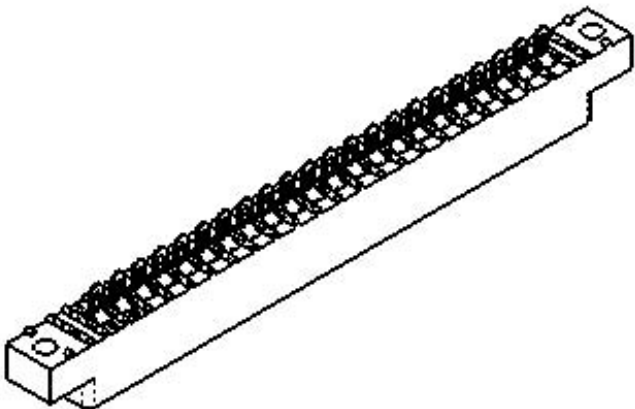
P = .142" DIA. CLEARANCE HOLES (PAGE 1)

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]                                                                                                                                                                                                     |  | DATE<br>8/2/2006 |  | NAME<br>HT         |  |
| TOLERANCES:<br>ANGULAR: ± 1°<br>XX=± .02 [.508]<br>.XXX=± .005 [.127]<br>.XXXX=± .0005 [.0127]<br>PARENTHEICAL INFORMATION IS FOR<br>REFERENCE ONLY                                                                                                             |  |                  |  |                    |  |
| 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. |  |                  |  |                    |  |
| INTERPRET DIMENSIONS AND GEOMETRIC<br>TOLERANCING<br>PER: ANSI Y14.5-1984                                                                                                                                                                                       |  | SIZE<br>C        |  | DWG. NO.<br>C10454 |  |
| SCALE: 2:1                                                                                                                                                                                                                                                      |  | SHEET 3 OF 3     |  | REV<br>F           |  |