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We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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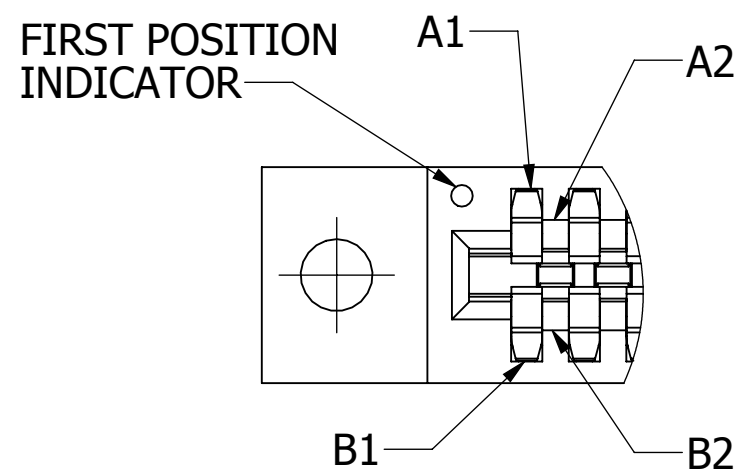
Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

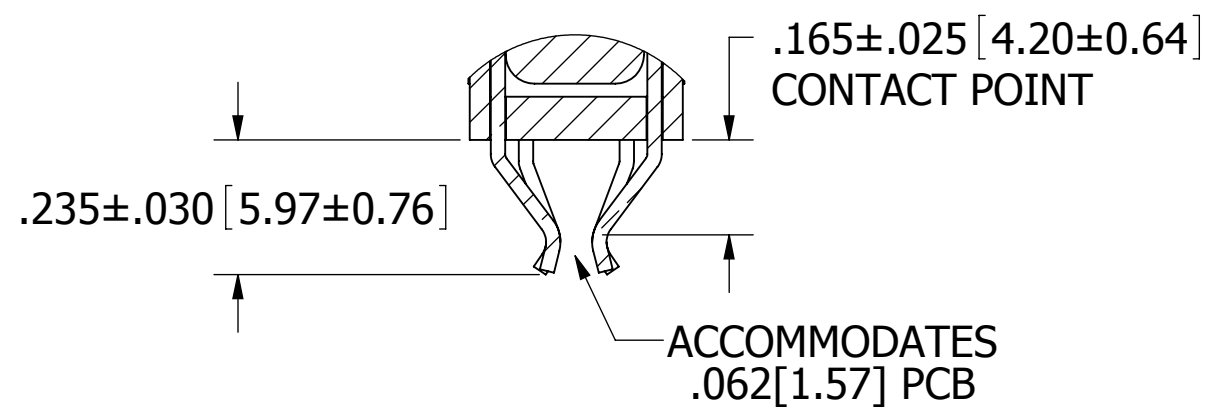
Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



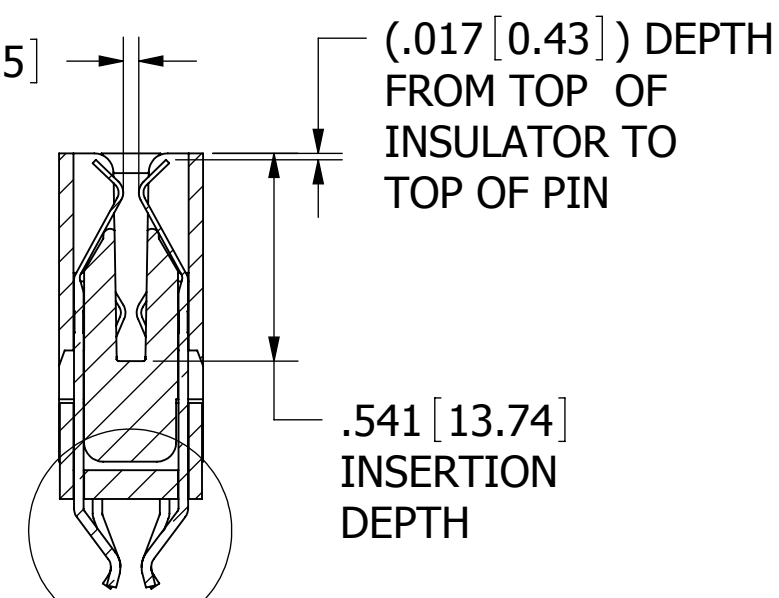
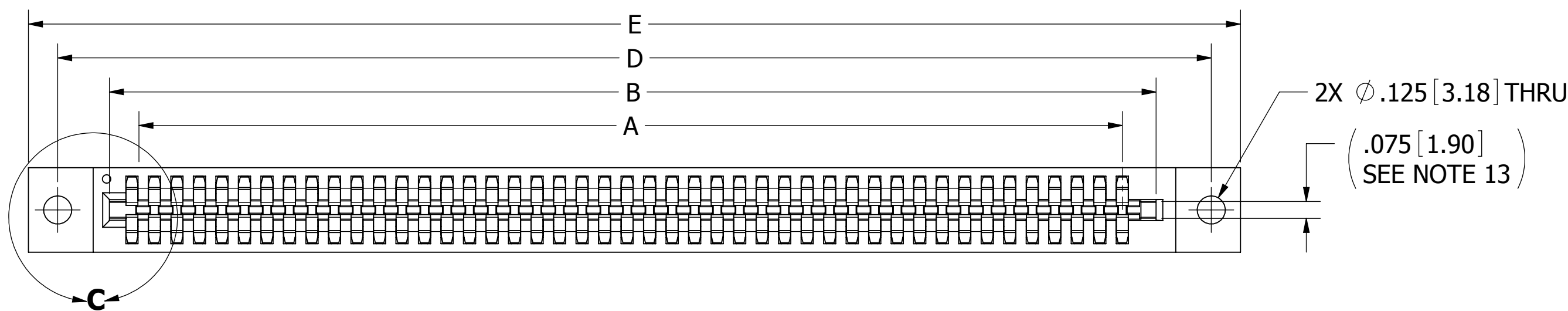
| REVISIONS | | | | |
|-----------|---------|---|------------|------|
| REV. | ECO. NO | DESCRIPTION | DATE | BY |
| A | 1096 | INITIAL RELEASE | 3/19/2008 | VJ |
| B | 1829 | UPDATE NOTES AND FORMAT | 10/24/2008 | ASK |
| C | 1864 | ADD D, T, V, AND Z MTG, REMOVE A AND R MATERIAL OPTIONS | 12/2/2008 | MNH |
| D | 1866 | SHOW FIRST POSITION INDICATOR, ADD VOLATAFE DROP NOTE. | 12/4/2008 | MNH |
| E | 2475 | ADDED POSITION # TO 120, DIM A+.050 TO PCB LAYOUT, UPDATED DIM A (WAS A1 & A2), NOTES FOR INSPECTION, CONTACT GAP .030 ± .010, INSERTION FORCE 8 OZ MAX, CONTACT LOCATION NOTE (DETAIL C), PROCESSING TIME 20 SEC FOR 'G' & 'J' MTL | 10/20/2011 | JH |
| F | 2851 | REMOVE 'D', 'V', 'Z', 'T' MOUNTING OPTIONS | 4/3/2014 | JHSU |



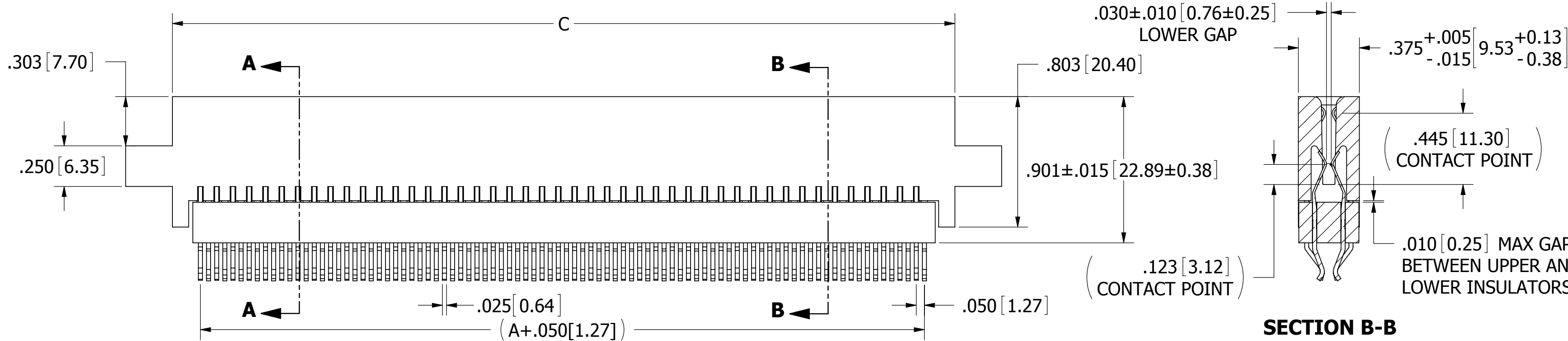
DETAIL C



DETAIL D



SECTION A-A

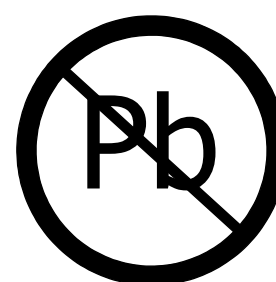


SECTION B-B

--B--DLRH

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.
- VOLTAGE RATING: 225 VAC MINIMUM AT SEA LEVEL.
- CURRENT RATING: 3 AMP PER CONTACT.
- CONTACT RESISTANCE: 30 MILLI OHMS MAX.
- INSULATION RESISTANCE: 5000 MEGA OHMS.
- DURABILITY: 500 CYCLES MIN.
- 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: 8 OZ MAX PER CONTACT PAIR WHEN USING A .062 [1.57] TEST BLADE.
- WITHDRAWAL FORCE: 1 OZ MIN PER CONTACT PAIR USING .062 [1.57] PCB.



RoHS COMPLIANT

CUSTOMER COPY

| | | | | |
|---|---|--------------|------|-------------------|
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [MM] | DRAWN | DATE | NAME | |
| | | 12/4/2008 | MNH | |
| TOLERANCES: ANGULAR: ± 1° DECIMALS .XX = ± .02 [.5] .XXX = ± .005 [.13] .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 |
| | | | | BI-LEVEL, .050 CC |
| PART NUMBER | | | | --B--DLR-- |
| SIZE | CAGE CODE | DWG. NO. | REV | |
| C | 54453 | C10790 | F | |
| SCALE: 2:1 | | SHEET 1 OF 4 | | |

PART NUMBER CODING

MATERIALS (INSULATOR / CONTACT)

G = PA9T / PHOSPHOR BRONZE

OPERATING TEMP: -65°C TO +125°C

PROCESSING TEMP: 260°C MAX FOR 20 SECS

J = PA9T / BERYLLIUM COPPER

OPERATING TEMP: -65°C TO +150°C

PROCESSING TEMP: 260°C MAX FOR 20 SECS

(CONSULT FACTORY FOR OTHER MATERIALS)

MOUNTING STYLE

H = ϕ .125[3.18] MOUNTING HOLES (PAGE 1)

S = ϕ .125[3.18] SIDE MOUNTING HOLES (PAGE 2)

I = #4-40 THREADED INSERTS (PAGE 2)

A = #4-40 THREADED INSERTS IN SIDE HOLES (PAGE 2)

N = NO MOUNTING EARS (PAGE 2)

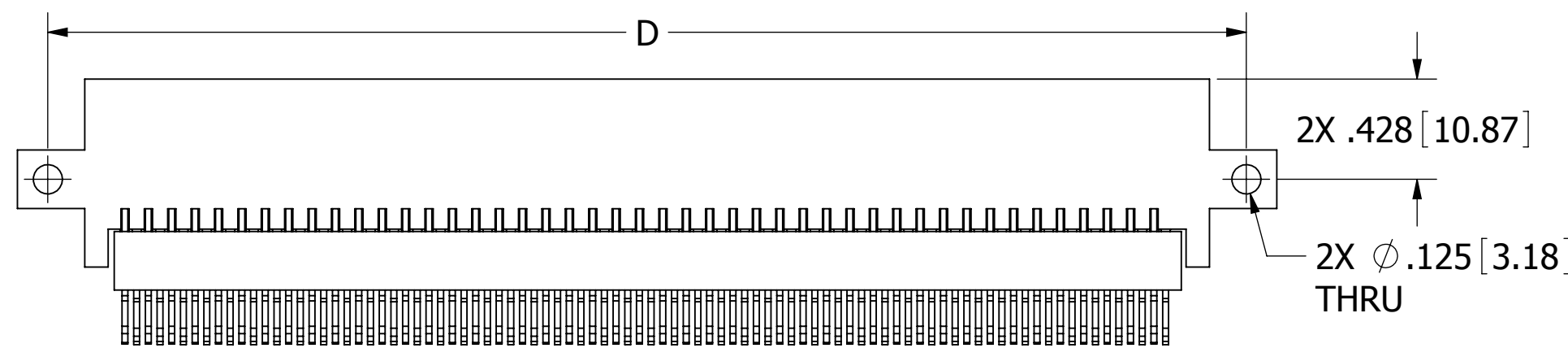
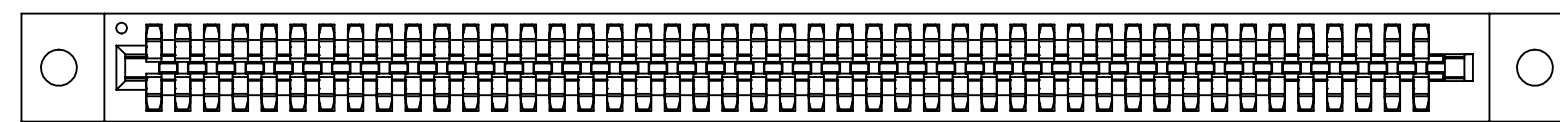
NUMBER OF POSITIONS

(CONTACT PER ROW)

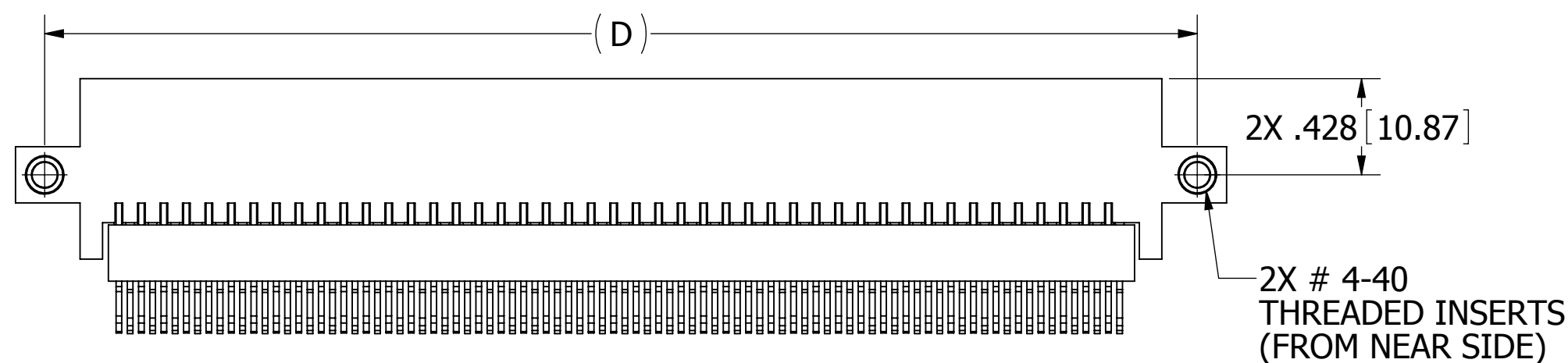
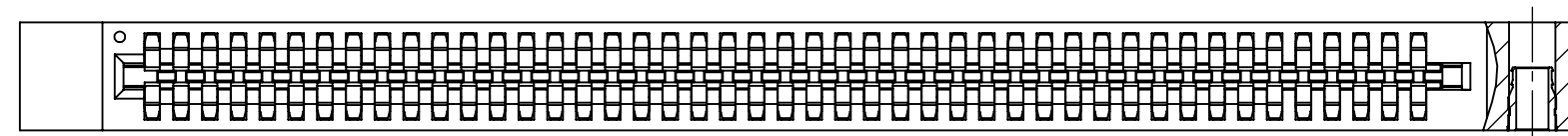
PLATING

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

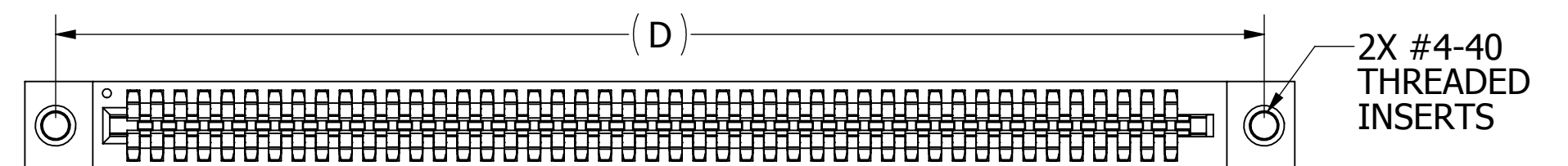
| | CONTACT SURFACE | TERMINATION |
|-----|-----------------|--------------------------|
| Y = | .000030" GOLD | .000005" GOLD |
| B = | .000010" GOLD | .000100" PURE TIN, MATTE |
| C = | .000030" GOLD | .000100" PURE TIN, MATTE |



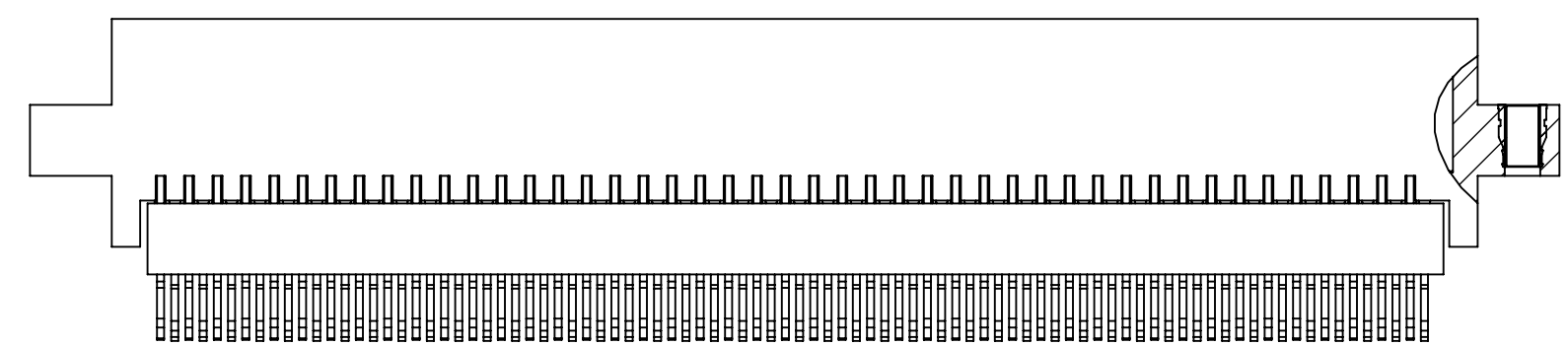
__B__DLRS



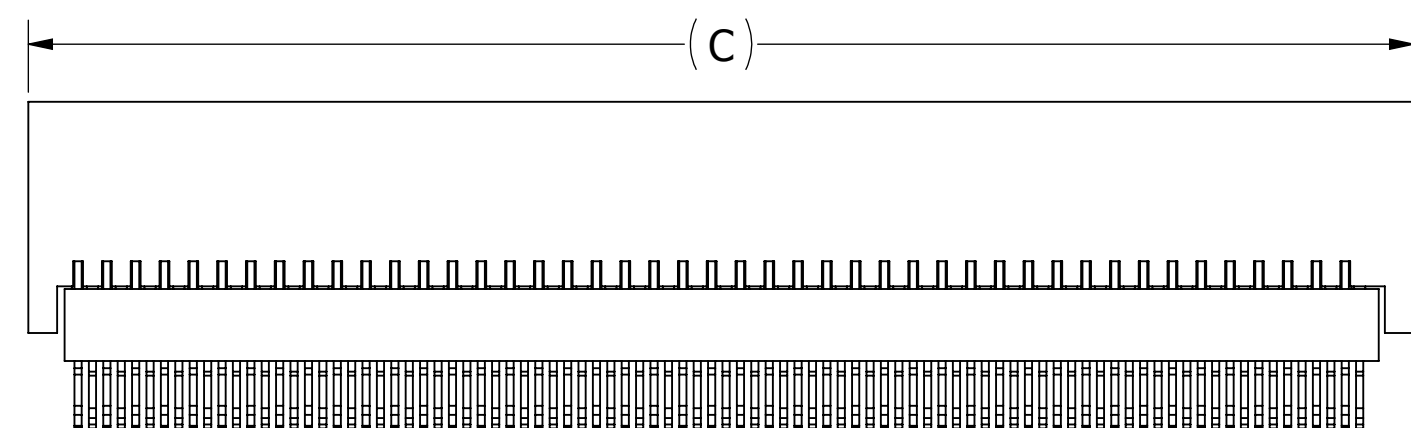
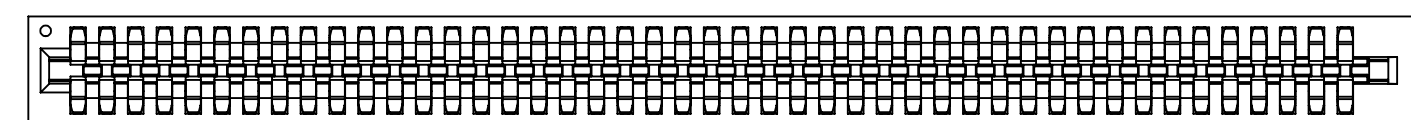
__B__DLRA



2X #4-40
THREADED
INSERTS

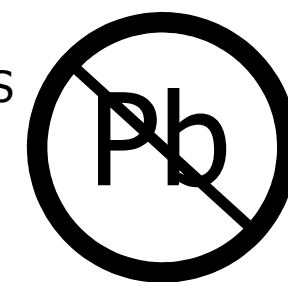


__B__DLRI



__B__DLRN

CUSTOMER COPY



RoHS COMPLIANT

UNLESS OTHERWISE SPECIFIED:
DIMENSIONS ARE IN INCHES [MM]

TOLERANCES:

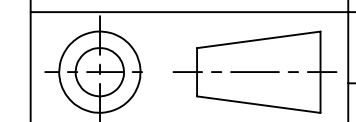
ANGULAR: $\pm 1^\circ$

DECIMALS

.XX = $\pm .02$ [.5]
.XXX = $\pm .005$ [.13]
.XXXX = $\pm .0005$ [.013]

| DRAWN | DATE | NAME |
|-------|-----------|------|
| | 12/4/2008 | MNH |

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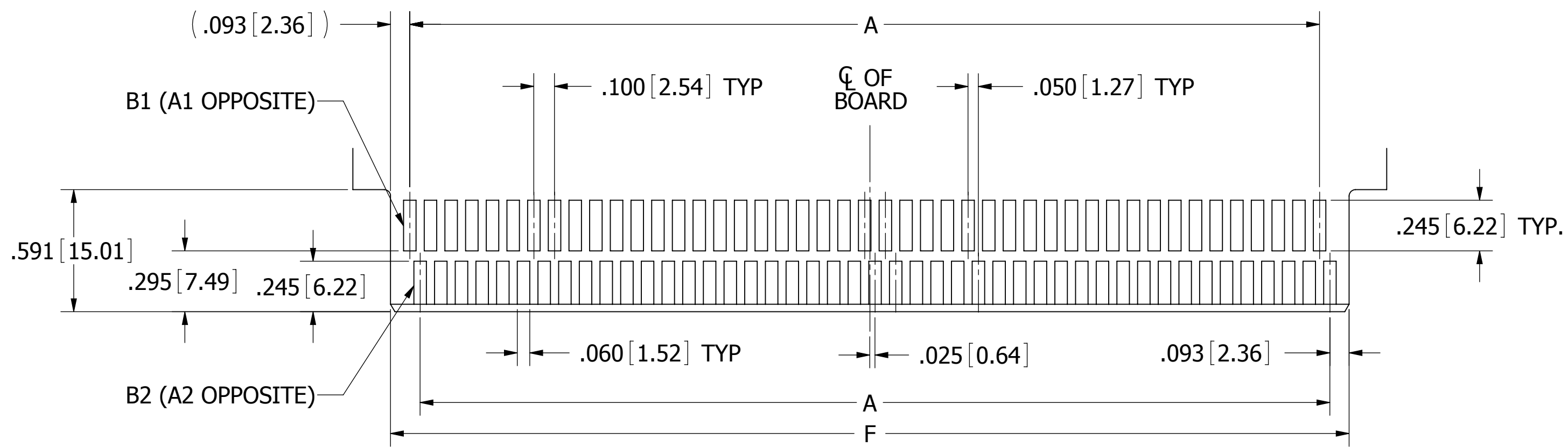


TITLE **BI-LEVEL, .050 CC**

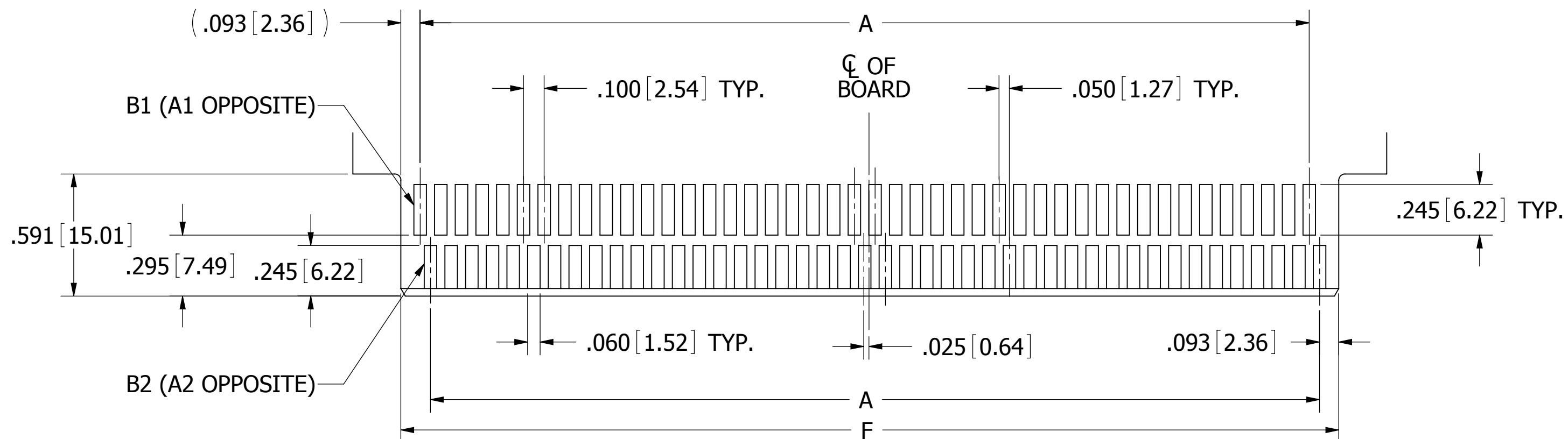
PART NUMBER **__B__DLR__**

SIZE **C** CAGE CODE **54453** DWG. NO. **C10790** REV **F**

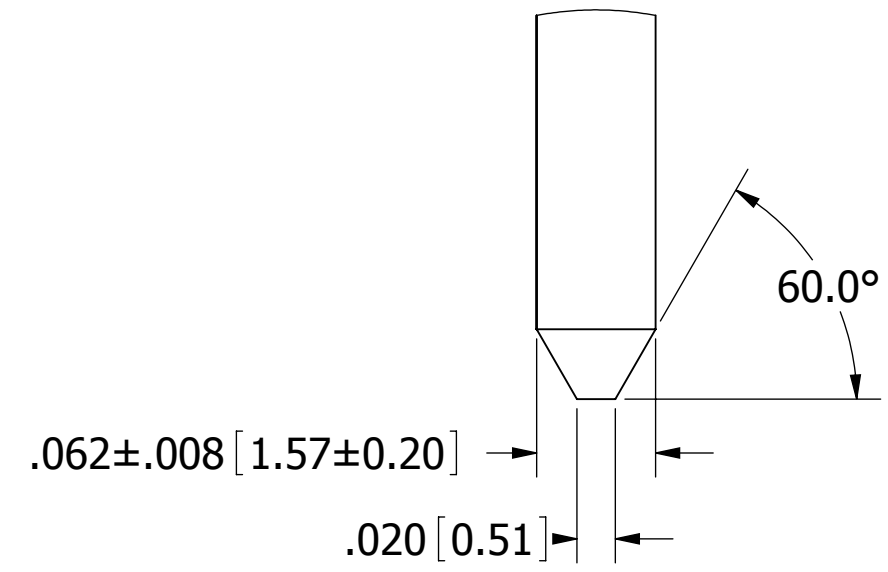
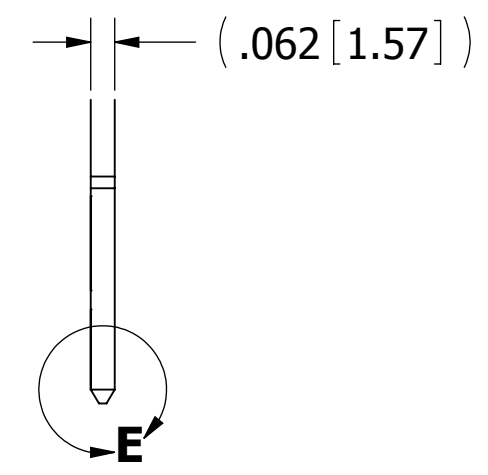
SCALE: 1.5:1 SHEET 2 OF 4



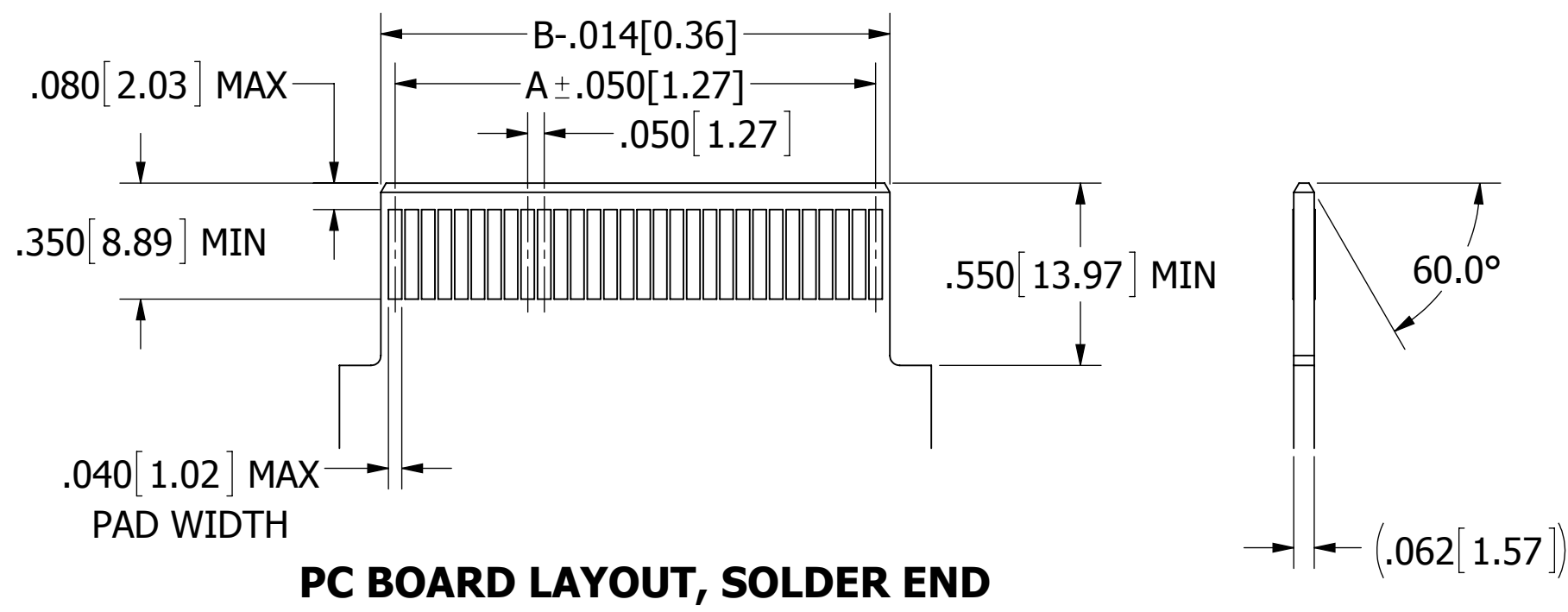
DAUGHTER CARD LAYOUT NUMBER 1
90 POSITION SHOWN
REFER TO PAGE 4 TO DETERMINE LAYOUT TO USE



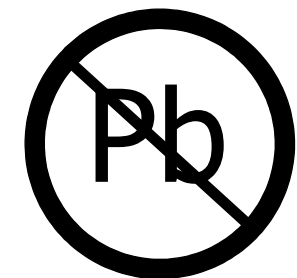
DAUGHTER CARD LAYOUT NUMBER 2
88 POSITION SHOWN
REFER TO PAGE 4 TO DETERMINE LAYOUT TO USE



DETAIL E



PC BOARD LAYOUT, SOLDER END

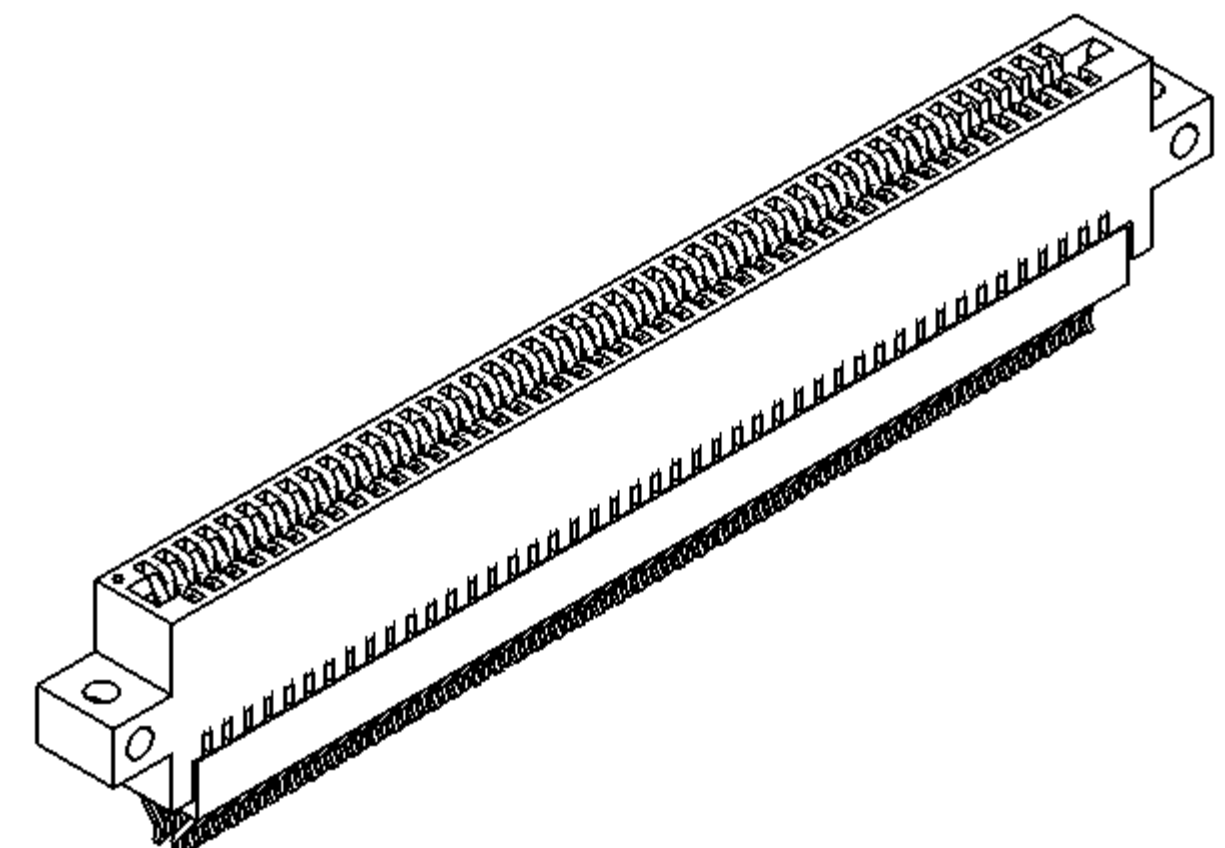


RoHS COMPLIANT

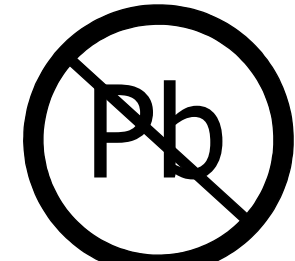
CUSTOMER COPY

| | | | | |
|---|---|-----------|------|-------------------|
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [MM] | DRAWN | DATE | NAME | |
| | | 12/4/2008 | MNH | |
| TOLERANCES: ANGULAR: ± 1° DECIMALS .XX = ± .02 [.5] .XXX = ± .005 [.13] .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 |
| | | | | BI-LEVEL, .050 CC |
| PART NUMBER | | | | __B__DLR__ |
| SIZE | CAGE CODE | DWG. NO. | REV | |
| C | 54453 | C10790 | F | |
| SCALE: 2:1 | | | | SHEET 3 OF 4 |

| PART NUMBER | POSITIONS/ CONTACTS | INCHES | | | | | | POSITIONS/ CONTACTS | MILLIMETERS | | | | | | DAUGHTER CARD LAYOUT |
|-------------|------------------------|--------|--------|--------|-------------------|--------|-------|------------------------|-------------|--------|--------|-------------------|--------|--------|-------------------------|
| | | A±.005 | B±.005 | C±.015 | D±.010 | E±.020 | F | | A±0.13 | B±0.13 | C±0.38 | D±0.25 | E±0.51 | F | |
| B06DLR | 6/12 | 0.200 | 0.450 | 0.610 | 0.925 | 1.185 | 0.436 | 6/12 | 5.08 | 11.43 | 15.49 | 23.50 | 30.10 | 11.07 | 1 |
| B08DLR | 8/16 | 0.300 | 0.550 | 0.710 | 1.025 | 1.285 | 0.536 | 8/16 | 7.62 | 13.97 | 18.03 | 26.04 | 32.64 | 13.61 | 2 |
| B10DLR | 10/20 | 0.400 | 0.650 | 0.810 | 1.125 | 1.385 | 0.636 | 10/20 | 10.16 | 16.51 | 20.57 | 28.58 | 35.18 | 16.15 | 1 |
| B12DLR | 12/24 | 0.500 | 0.750 | 0.910 | 1.225 | 1.485 | 0.736 | 12/24 | 12.70 | 19.05 | 23.11 | 31.12 | 37.72 | 18.69 | 2 |
| B14DLR | 14/28 | 0.600 | 0.850 | 1.010 | 1.325 | 1.585 | 0.836 | 14/28 | 15.24 | 21.59 | 25.65 | 33.66 | 40.26 | 21.23 | 1 |
| B16DLR | 16/32 | 0.700 | 0.950 | 1.110 | 1.425 | 1.685 | 0.936 | 16/32 | 17.78 | 24.13 | 28.19 | 36.20 | 42.80 | 23.77 | 2 |
| B18DLR | 18/36 | 0.800 | 1.050 | 1.210 | 1.525 | 1.785 | 1.036 | 18/36 | 20.32 | 26.67 | 30.73 | 38.74 | 45.34 | 26.31 | 1 |
| B20DLR | 20/40 | 0.900 | 1.150 | 1.310 | 1.625 | 1.885 | 1.136 | 20/40 | 22.86 | 29.21 | 33.27 | 41.28 | 47.88 | 28.85 | 2 |
| B22DLR | 22/44 | 1.000 | 1.250 | 1.410 | 1.725 | 1.985 | 1.236 | 22/44 | 25.40 | 31.75 | 35.81 | 43.82 | 50.42 | 31.39 | 1 |
| B24DLR | 24/48 | 1.100 | 1.350 | 1.510 | 1.825 | 2.085 | 1.336 | 24/48 | 27.94 | 34.29 | 38.35 | 46.36 | 52.96 | 33.93 | 2 |
| B26DLR | 26/52 | 1.200 | 1.450 | 1.610 | 1.925 | 2.185 | 1.436 | 26/52 | 30.48 | 36.83 | 40.89 | 48.90 | 55.50 | 36.47 | 1 |
| B28DLR | 28/56 | 1.300 | 1.550 | 1.710 | 2.025 | 2.285 | 1.536 | 28/56 | 33.02 | 39.37 | 43.43 | 51.44 | 58.04 | 39.01 | 2 |
| B30DLR | 30/60 | 1.400 | 1.650 | 1.810 | 2.125 | 2.385 | 1.636 | 30/60 | 35.56 | 41.91 | 45.97 | 53.98 | 60.58 | 41.55 | 1 |
| B32DLR | 32/64 | 1.500 | 1.750 | 1.910 | 2.225 | 2.485 | 1.736 | 32/64 | 38.10 | 44.45 | 48.51 | 56.52 | 63.12 | 44.09 | 2 |
| B34DLR | 34/68 | 1.600 | 1.850 | 2.010 | 2.325 | 2.585 | 1.836 | 34/68 | 40.64 | 46.99 | 51.05 | 59.06 | 65.66 | 46.63 | 1 |
| B36DLR | 36/72 | 1.700 | 1.950 | 2.110 | 2.425 | 2.685 | 1.936 | 36/72 | 43.18 | 49.53 | 53.59 | 61.60 | 68.20 | 49.17 | 2 |
| B38DLR | 38/76 | 1.800 | 2.050 | 2.210 | 2.525 | 2.785 | 2.036 | 38/76 | 45.72 | 52.07 | 56.13 | 64.14 | 70.74 | 51.71 | 1 |
| B40DLR | 40/80 | 1.900 | 2.150 | 2.310 | 2.625 | 2.885 | 2.136 | 40/80 | 48.26 | 54.61 | 58.67 | 66.68 | 73.28 | 54.25 | 2 |
| B42DLR | 42/84 | 2.000 | 2.250 | 2.410 | 2.725 | 2.985 | 2.236 | 42/84 | 50.80 | 57.15 | 61.21 | 69.22 | 75.82 | 56.79 | 1 |
| B44DLR | 44/88 | 2.100 | 2.350 | 2.510 | 2.825 | 3.085 | 2.336 | 44/88 | 53.34 | 59.69 | 63.75 | 71.76 | 78.36 | 59.33 | 2 |
| B46DLR | 46/92 | 2.200 | 2.450 | 2.610 | 2.925 | 3.185 | 2.436 | 46/92 | 55.88 | 62.23 | 66.29 | 74.30 | 80.90 | 61.87 | 1 |
| B48DLR | 48/96 | 2.300 | 2.550 | 2.710 | 3.025 | 3.285 | 2.536 | 48/96 | 58.42 | 64.77 | 68.83 | 76.84 | 83.44 | 64.41 | 2 |
| B50DLR | 50/100 | 2.400 | 2.650 | 2.810 | 3.125 | 3.385 | 2.636 | 50/100 | 60.96 | 67.31 | 71.37 | 79.38 | 85.98 | 66.95 | 1 |
| B52DLR | 52/104 | 2.500 | 2.750 | 2.910 | 3.225 | 3.485 | 2.736 | 52/104 | 63.50 | 69.85 | 73.91 | 81.92 | 88.52 | 69.49 | 2 |
| B54DLR | 54/108 | 2.600 | 2.850 | 3.010 | 3.325 | 3.585 | 2.836 | 54/108 | 66.04 | 72.39 | 76.45 | 84.46 | 91.06 | 72.03 | 1 |
| B56DLR | 56/112 | 2.700 | 2.950 | 3.110 | 3.425 | 3.685 | 2.936 | 56/112 | 68.58 | 74.93 | 78.99 | 87.00 | 93.60 | 74.57 | 2 |
| B58DLR | 58/116 | 2.800 | 3.050 | 3.210 | 3.525 | 3.785 | 3.036 | 58/116 | 71.12 | 77.47 | 81.53 | 89.54 | 96.14 | 77.11 | 1 |
| B60DLR | 60/120 | 2.900 | 3.150 | 3.310 | 3.625 | 3.885 | 3.136 | 60/120 | 73.66 | 80.01 | 84.07 | 92.08 | 98.68 | 79.65 | 2 |
| B62DLR | 62/124 | 3.000 | 3.250 | 3.410 | 3.725 | 3.985 | 3.236 | 62/124 | 76.20 | 82.55 | 86.61 | 94.62 | 101.22 | 82.19 | 1 |
| B64DLR | 64/128 | 3.100 | 3.350 | 3.510 | 3.825 | 4.085 | 3.336 | 64/128 | 78.74 | 85.09 | 89.15 | 97.16 | 103.76 | 84.73 | 2 |
| B66DLR | 66/132 | 3.200 | 3.450 | 3.610 | 3.925 | 4.185 | 3.436 | 66/132 | 81.28 | 87.63 | 91.69 | 99.70 | 106.30 | 87.27 | 1 |
| B68DLR | 68/136 | 3.300 | 3.550 | 3.710 | 4.025 | 4.285 | 3.536 | 68/136 | 83.82 | 90.17 | 94.23 | 102.24 | 108.84 | 89.81 | 2 |
| B70DLR | 70/140 | 3.400 | 3.650 | 3.810 | 4.125 | 4.385 | 3.636 | 70/140 | 86.36 | 92.71 | 96.77 | 104.78 | 111.38 | 92.35 | 1 |
| B72DLR | 72/144 | 3.500 | 3.750 | 3.910 | 4.225 | 4.485 | 3.736 | 72/144 | 88.90 | 95.25 | 99.31 | 107.32 | 113.92 | 94.89 | 2 |
| B74DLR | 74/148 | 3.600 | 3.850 | 4.010 | 4.325 | 4.585 | 3.836 | 74/148 | 91.44 | 97.79 | 101.85 | 109.86 | 116.46 | 97.43 | 1 |
| B76DLR | 76/152 | 3.700 | 3.950 | 4.110 | 4.425 | 4.685 | 3.936 | 76/152 | 93.98 | 100.33 | 104.39 | 112.40 | 119.00 | 99.97 | 2 |
| B78DLR | 78/156 | 3.800 | 4.050 | 4.210 | 4.525 | 4.785 | 4.036 | 78/156 | 96.52 | 102.87 | 106.93 | 114.94 | 121.54 | 102.51 | 1 |
| B80DLR | 80/160 | 3.900 | 4.150 | 4.310 | 4.625 | 4.885 | 4.136 | 80/160 | 99.06 | 105.41 | 109.47 | 117.48 | 124.08 | 105.05 | 2 |
| B82DLR | 82/164 | 4.000 | 4.250 | 4.410 | 4.725 | 4.985 | 4.236 | 82/164 | 101.60 | 107.95 | 112.01 | 120.02 | 126.62 | 107.59 | 1 |
| B84DLR | 84/168 | 4.100 | 4.350 | 4.510 | 4.825 | 5.085 | 4.336 | 84/168 | 104.14 | 110.49 | 114.55 | 122.56 | 129.16 | 110.13 | 2 |
| B86DLR | 86/172 | 4.200 | 4.450 | 4.610 | 4.925 | 5.185 | 4.436 | 86/172 | 106.68 | 113.03 | 117.09 | 125.10 | 131.70 | 112.67 | 1 |
| B88DLR | 88/176 | 4.300 | 4.550 | 4.710 | 5.025 | 5.285 | 4.536 | 88/176 | 109.22 | 115.57 | 119.63 | 127.64 | 134.24 | 115.21 | 2 |
| B90DLR | 90/180 | 4.400 | 4.650 | 4.810 | 5.125 | 5.385 | 4.636 | 90/180 | 111.76 | 118.11 | 122.17 | 130.18 | 136.78 | 117.75 | 1 |
| B92DLR | 92/184 | 4.500 | 4.750 | 4.910 | 5.225 | 5.485 | 4.736 | 92/184 | 114.30 | 120.65 | 124.71 | 132.72 | 139.32 | 120.29 | 2 |
| B94DLR | 94/188 | 4.600 | 4.850 | 5.010 | 5.325 | 5.585 | 4.836 | 94/188 | 116.84 | 123.19 | 127.25 | 135.26 | 141.86 | 122.83 | 1 |
| B96DLR | 96/192 | 4.700 | 4.950 | 5.110 | 5.425 | 5.685 | 4.936 | 96/192 | 119.38 | 125.73 | 129.79 | 137.80 | 144.40 | 125.37 | 2 |
| B98DLR | 98/196 | 4.800 | 5.050 | 5.210 | 5.525 | 5.785 | 5.036 | 98/196 | 121.92 | 128.27 | 132.33 | 140.34 | 146.94 | 127.91 | 1 |
| B100DLR | 100/200 | 4.900 | 5.150 | 5.310 | 5.625 | 5.885 | 5.136 | 100/200 | 124.46 | 130.81 | 134.87 | 142.88 | 149.48 | 130.45 | 2 |
| B102DLR | 102/204 | 5.000 | 5.250 | 5.410 | 5.725 | 5.985 | 5.236 | 102/204 | 127.00 | 133.35 | 137.41 | 145.42 | 152.02 | 132.99 | 1 |
| B104DLR | 104/208 | 5.100 | 5.350 | 5.510 | 5.825 | 6.085 | 5.336 | 104/208 | 129.54 | 135.89 | 139.95 | 147.96 | 154.56 | 135.53 | 2 |
| B106DLR | 106/212 | 5.200 | 5.450 | 5.610 | 5.925 | 6.185 | 5.436 | 106/212 | 132.08 | 138.43 | 142.49 | 150.50 | 157.10 | 138.07 | 1 |
| B108DLR | 108/216 | 5.300 | 5.550 | 5.710 | 6.025 | 6.285 | 5.536 | 108/216 | 134.62 | 140.97 | 145.03 | 153.04 | 159.64 | 140.61 | 2 |
| B110DLR | 110/220 | 5.400 | 5.650 | 5.810 | 'N' MOUNTING ONLY | | 5.636 | 110/220 | 137.16 | 143.51 | 147.57 | 'N' MOUNTING ONLY | | 143.15 | 1 |
| B112DLR | 112/224 | 5.500 | 5.750 | 5.910 | | | 5.736 | 112/224 | 139.70 | 146.05 | 150.11 | | | 145.69 | 2 |
| B114DLR | 114/228 | 5.600 | 5.850 | 6.010 | | | 5.836 | 114/228 | 142.24 | 148.59 | 152.65 | | | 148.23 | 1 |
| B116DLR | 116/232 | 5.700 | 5.950 | 6.110 | | | 5.936 | 116/232 | 144.78 | 151.13 | 155.19 | | | 150.77 | 2 |
| B118DLR | 118/236 | 5.800 | 6.050 | 6.210 | | | 6.036 | 118/236 | 147.32 | 153.67 | 157.73 | | | 153.31 | 1 |
| B120DLR | 120/240 | 5.900 | 6.150 | 6.310 | | | 6.136 | 120/240 | 149.86 | 156.21 | 160.27 | | | 155.85 | 2 |



CUSTOMER COPY



RoHS COMPLIANT

| | | | | | |
|---|---|--------------|----------|-------------|-------------------|
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES (MM) | DRAWN | DATE | NAME | | |
| | | 12/4/2008 | MNH | | |
| TOLERANCES: ANGULAR: ± 1° DECIMALS .XX=± .02 [.5] .XXX=± .005 [.13] .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 | BI-LEVEL, .050 CC |
| | | | | PART NUMBER | __B__DLR__ |
| | SIZE | CAGE CODE | DWG. NO. | REV | |
| | C | 54453 | C10790 | F | |
| | SCALE: 1.5:1 | SHEET 4 OF 4 | | | |