

| POSITIONS/ CONTACTS | A | | B | |
|------------------------|-----------|---------|-----------|---------|
| | INCH±.008 | MM±0.20 | INCH±.012 | MM±0.30 |
| 02/04 | 0.050 | 1.27 | 0.100 | 2.54 |
| 03/06 | 0.100 | 2.54 | 0.150 | 3.81 |
| 04/08 | 0.150 | 3.81 | 0.200 | 5.08 |
| 05/10 | 0.200 | 5.08 | 0.250 | 6.35 |
| 06/12 | 0.250 | 6.35 | 0.300 | 7.62 |
| 07/14 | 0.300 | 7.62 | 0.350 | 8.89 |
| 08/16 | 0.350 | 8.89 | 0.400 | 10.16 |
| 09/18 | 0.400 | 10.16 | 0.450 | 11.43 |
| 10/20 | 0.450 | 11.43 | 0.500 | 12.70 |
| 11/21 | 0.500 | 12.70 | 0.550 | 13.97 |
| 12/24 | 0.550 | 13.97 | 0.600 | 15.24 |
| 13/26 | 0.600 | 15.24 | 0.650 | 16.51 |
| 14/28 | 0.650 | 16.51 | 0.700 | 17.78 |
| 15/30 | 0.700 | 17.78 | 0.750 | 19.05 |
| 16/32 | 0.750 | 19.05 | 0.800 | 20.32 |
| 17/34 | 0.800 | 20.32 | 0.850 | 21.59 |
| 18/36 | 0.850 | 21.59 | 0.900 | 22.86 |
| 19/38 | 0.900 | 22.86 | 0.950 | 24.13 |
| 20/40 | 0.950 | 24.13 | 1.000 | 25.40 |
| 21/42 | 1.000 | 25.40 | 1.050 | 26.67 |
| 22/44 | 1.050 | 26.67 | 1.100 | 27.94 |
| 23/46 | 1.100 | 27.94 | 1.150 | 29.21 |
| 24/48 | 1.150 | 29.21 | 1.200 | 30.48 |
| 25/50 | 1.200 | 30.48 | 1.250 | 31.75 |
| 26/52 | 1.250 | 31.75 | 1.300 | 33.02 |
| 27/54 | 1.300 | 33.02 | 1.350 | 34.29 |
| 28/56 | 1.350 | 34.29 | 1.400 | 35.56 |
| 29/58 | 1.400 | 35.56 | 1.450 | 36.83 |
| 30/60 | 1.450 | 36.83 | 1.500 | 38.10 |
| 31/62 | 1.500 | 38.10 | 1.550 | 39.37 |
| 32/64 | 1.550 | 39.37 | 1.600 | 40.64 |
| 33/66 | 1.600 | 40.64 | 1.650 | 41.91 |
| 34/68 | 1.650 | 41.91 | 1.700 | 43.18 |
| 35/70 | 1.700 | 43.18 | 1.750 | 44.45 |
| 36/72 | 1.750 | 44.45 | 1.800 | 45.72 |
| 37/74 | 1.800 | 45.72 | 1.850 | 46.99 |
| 38/76 | 1.850 | 46.99 | 1.900 | 48.26 |
| 39/78 | 1.900 | 48.26 | 1.950 | 49.53 |
| 40/80 | 1.950 | 49.53 | 2.000 | 50.80 |
| 41/82 | 2.000 | 50.80 | 2.050 | 52.07 |
| 42/84 | 2.050 | 52.07 | 2.100 | 53.34 |
| 43/86 | 2.100 | 53.34 | 2.150 | 54.61 |
| 44/88 | 2.150 | 54.61 | 2.200 | 55.88 |
| 45/90 | 2.200 | 55.88 | 2.250 | 57.15 |
| 46/92 | 2.250 | 57.15 | 2.300 | 58.42 |
| 47/94 | 2.300 | 58.42 | 2.350 | 59.69 |
| 48/96 | 2.350 | 59.69 | 2.400 | 60.96 |
| 49/98 | 2.400 | 60.96 | 2.450 | 62.23 |
| 50/100 | 2.450 | 62.23 | 2.500 | 63.50 |

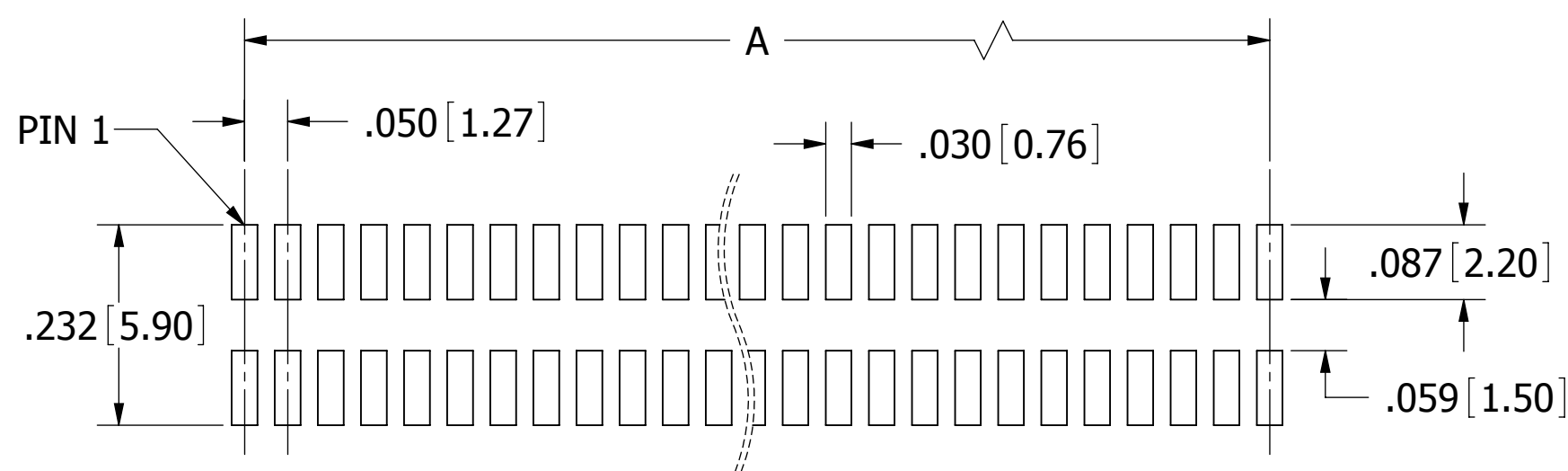
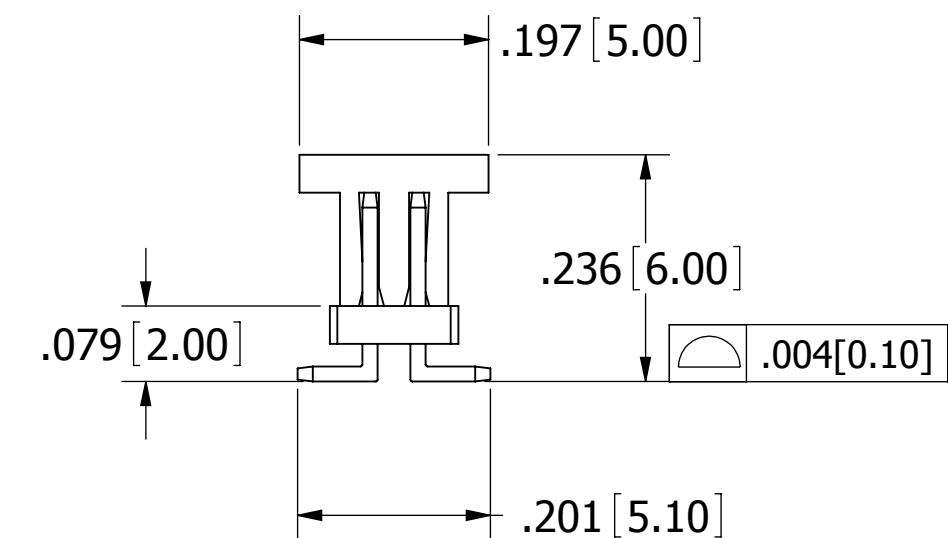
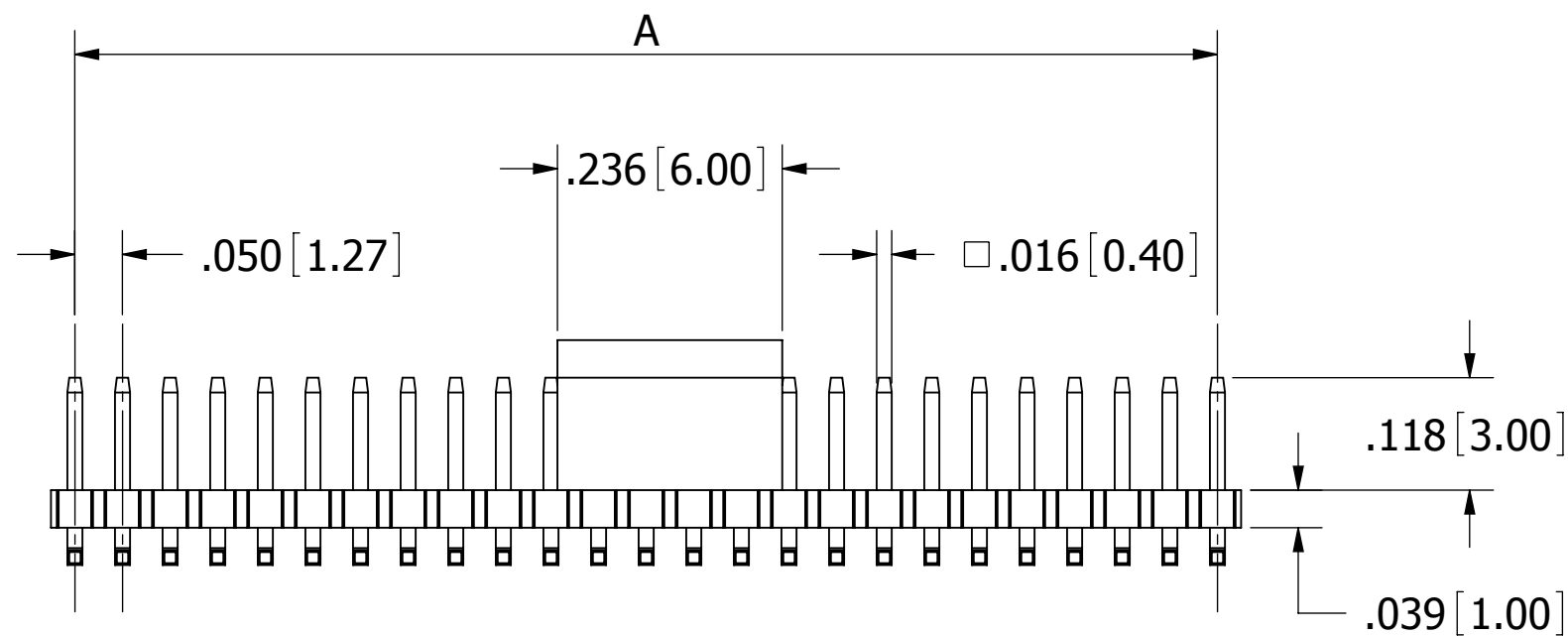
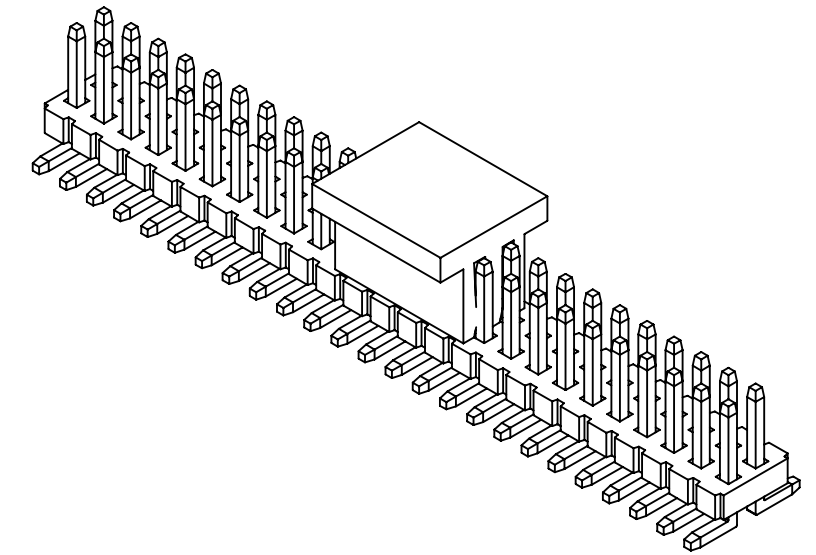
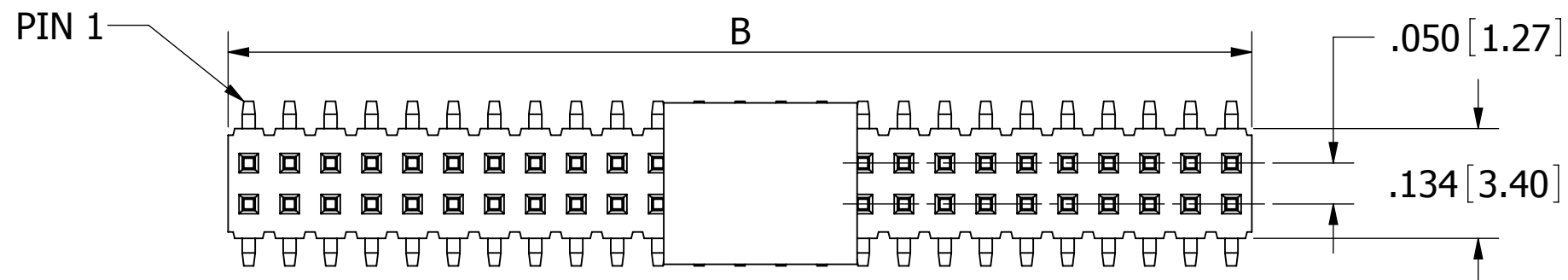
PART NUMBER CODING

GRPB__2VWQS-M81RC

NUMBER OF POSITIONS

(CONTACTS PER ROW, 2 THRU 50)

| REVISIONS | | | | |
|-----------|---------|-----------------|------------|----|
| REV. | ECO. NO | DESCRIPTION | DATE | BY |
| A | 1837 | INITIAL RELEASE | 09/06/2010 | LH |

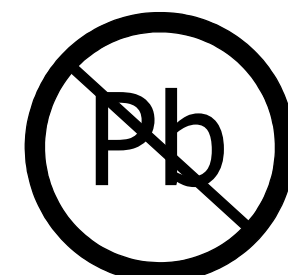


RECOMMENDED PCB LAYOUT

- NOTES:
- INSULATOR MATERIAL: NYLON 9T.
*PROCESSING TEMPERATURE: 230° C FOR 60 SECONDS MAX.
(260° C FOR 10 SECONDS MAX.)

- CONTACT MATERIAL: BRASS.
- PLATING: GOLD FLASH OVERALL.
- OPERATING TEMPERATURE: -40° C TO +105° C.
- INSULATOR RESISTANCE: 5000 MEGA OHM MIN.
- CONTACT RESISTANCE: 20 MILLIOHMS MAX.
- DIELECTRIC WITHSTANDING: AC 500V.
- UL FLAMMABILITY RATING: 94V-0.
- CURRENT RATING: 1 AMP.
- MODIFICATION: WITH PICK & PLACE CAP IN TAPE & REEL.

*INDICATED TEMPERATURE AND TIME IS FOR COMPONENT INSULATOR. HIGHER PROCESSING TEMPERATURES MAY BE USED, PROVIDED HEAT IS APPLIED FROM BACK SIDE OF PCB, AND INSULATOR DOES NOT EXCEED INDICATED TEMPERATURE AND TIME.



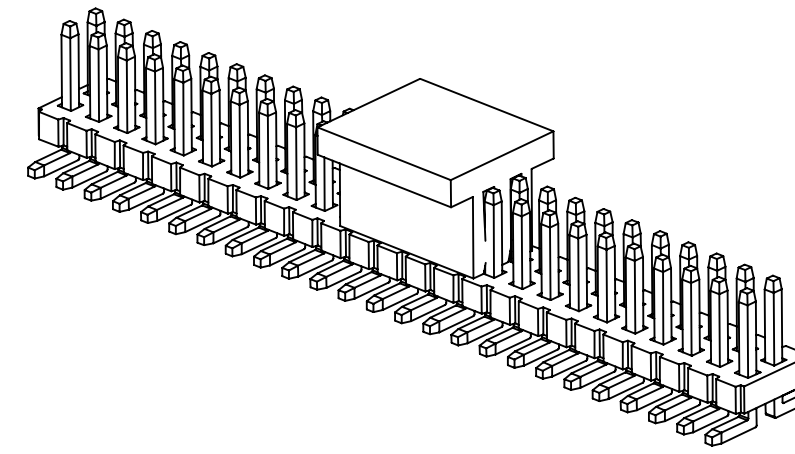
RoHS COMPLIANT

| | | | | |
|--|--|--------------|------|-------------------------------------|
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [MM] | DRAWN | DATE | NAME | |
| | | 9/6/2010 | LH | |
| TOLERANCES: ANGULAR: ± 30' .XX=± .012 [30] .XXX=± .008 [.20] .XXXX=± .004 [.10] | 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 |
| | INTERPRET DIMENSIONS AND TOLERANCING PER: ASME Y14.5M-2009 | | | .050" DUAL ROW MALE HEADER, SMT T&R |
| PART NUMBER | | | | REV |
| GRPB__2VWQS-M81RC | | | | A |
| SIZE | CAGE CODE | DWG. NO. | REV | |
| C | 54453 | 11575 | A | |
| SCALE: 8:1 | | SHEET 1 OF 2 | | |

NOTE:

1. 10 SPROCKET HOLES PITCH CUMULATIVE TOLERANCE $\pm 0.20\text{mm}$.
2. CARRIER CAMBER IS 1mm IN 100mm.
3. A0 AND B0 MEASURED ON A PLANE 0.3mm ABOVE THE BOTTOM OF THE POCKET.
4. K0 MEASURED FROM A PLANE ON THE INSIDE BOTTOM OF THE POCKET TO THE TOP SURFACE OF THE CARRIER.
5. PACKING CONFORMS EIA-481-2 STANDARDS.
6. 13" REEL= 10.5 METER, 800 PIECES.

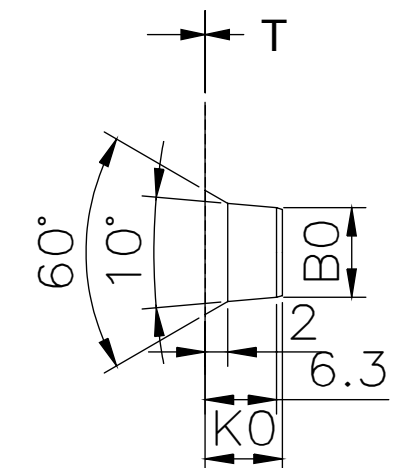
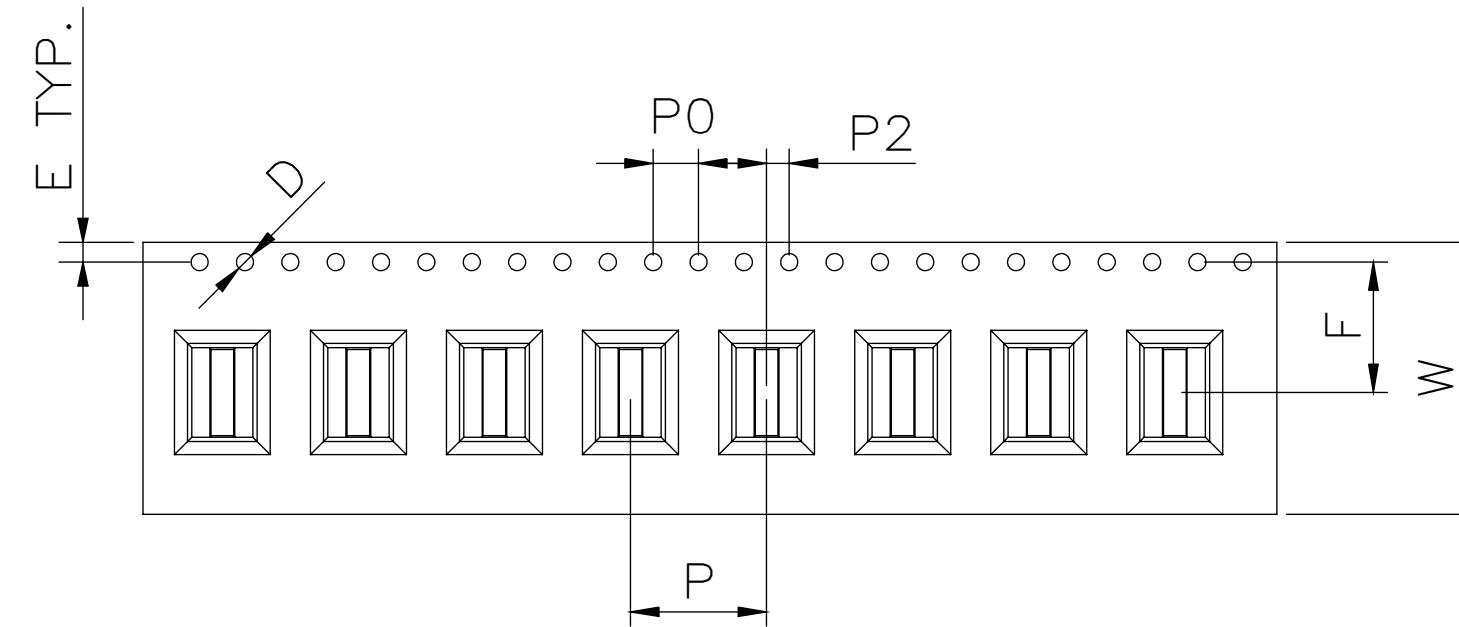
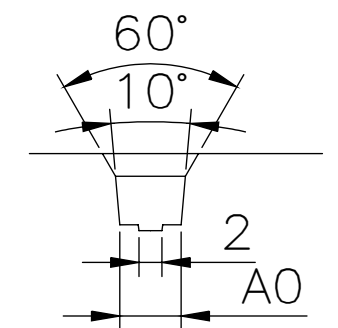
GRPB__2VWQS-M81RC



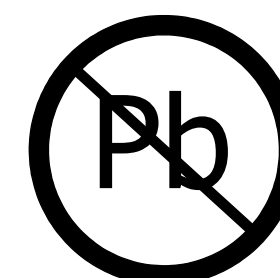
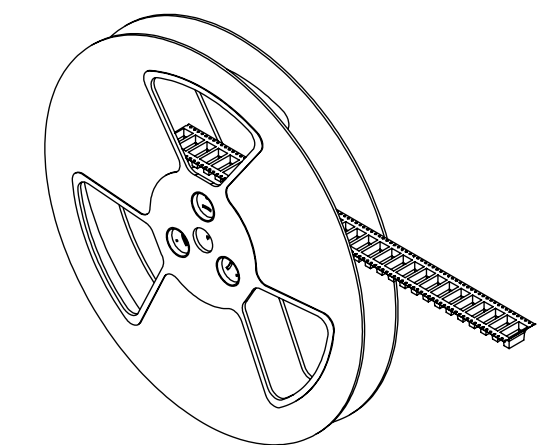
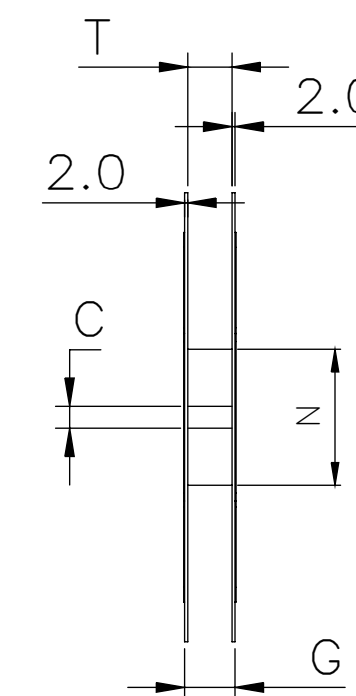
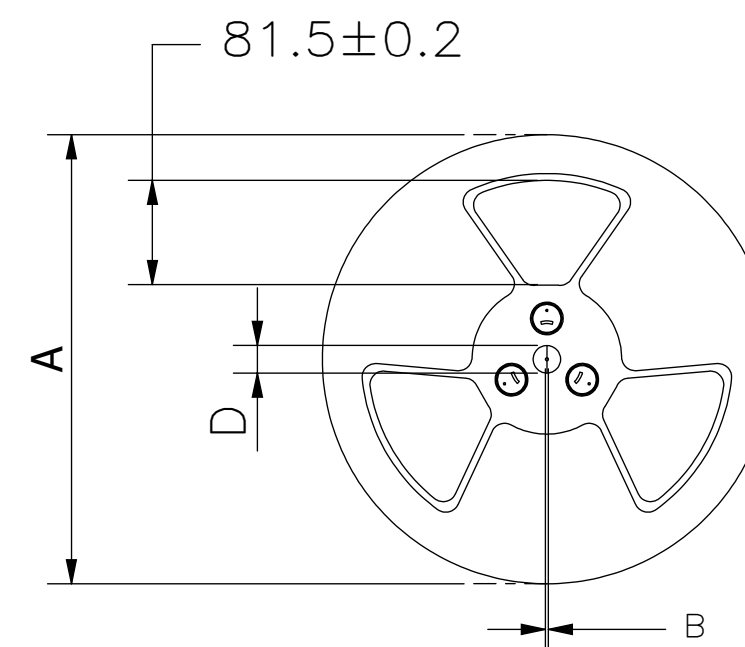
| POSITIONS/ CONTACTS | DIMENSIONS (unit: mm) | | | POSITIONS/ CONTACTS | DIMENSIONS (unit: mm) | | |
|------------------------|-----------------------|------|------|------------------------|-----------------------|------|------|
| | W | B0 | F | | W | B0 | F |
| 02/04 | 12 | 2.8 | 5.5 | 20/40 | 44 | 25.7 | 20.2 |
| 03/06 | 12 | 4.1 | 5.5 | 21/42 | 44 | 26.9 | 20.2 |
| 04/08 | 16 | 5.4 | 7.5 | 22/44 | 56 | 28.2 | 26.2 |
| 05/10 | 16 | 6.6 | 7.5 | 23/46 | 72 | 29.5 | 34.2 |
| 06/12 | 24 | 7.9 | 11.5 | 24/48 | 72 | 30.7 | 34.2 |
| 07/14 | 24 | 9.1 | 11.5 | 25/50 | 72 | 32.0 | 34.2 |
| 08/16 | 24 | 10.4 | 11.5 | 26/52 | 72 | 33.3 | 34.2 |
| 09/18 | 24 | 11.7 | 11.5 | 27/54 | 72 | 34.5 | 34.2 |
| 10/20 | 24 | 13.0 | 11.5 | 28/56 | 72 | 35.8 | 34.2 |
| 11/22 | 32 | 14.2 | 14.2 | 29/58 | 72 | 37.1 | 34.2 |
| 12/24 | 32 | 15.5 | 14.2 | 30/60 | 88 | 38.4 | 42.2 |
| 13/26 | 32 | 16.8 | 14.2 | 31/62 | 88 | 39.6 | 42.2 |
| 14/28 | 32 | 18.0 | 14.2 | 32/64 | 88 | 40.9 | 42.2 |
| 15/30 | 44 | 19.3 | 20.2 | 33/66 | 88 | 42.1 | 42.2 |
| 16/32 | 44 | 20.6 | 20.2 | 34/68 | 88 | 43.4 | 42.2 |
| 17/34 | 44 | 21.8 | 20.2 | 35/70 | 88 | 44.7 | 42.2 |
| 18/36 | 44 | 23.1 | 20.2 | 36/72 | 88 | 46.0 | 42.2 |
| 19/38 | 44 | 24.4 | 20.2 | 37/74 | 88 | 47.2 | 42.2 |

DEVICE TYPE: GRPB__2VWQS-M81RC

| DIMENSIONS | A0 ± 0.1 | K0 ± 0.1 | P ± 0.1 | E ± 0.1 | D $+0.1/-0.0$ | P0 ± 0.1 | P2 ± 0.1 |
|------------|--------------|--------------|-------------|-------------|---------------|--------------|--------------|
| (unit: mm) | 5.4 | 6.3 | 12 | 1.75 | 1.5 | 4.0 | 2.0 |



| DIMENSIONS (unit: mm) | | | | | | | CARRIER TAPE |
|-----------------------|-------------|-------------|-------------|-------------|-------------|-------------|--------------|
| A | B ± 0.5 | C ± 0.2 | D ± 1.0 | N ± 1.0 | T ± 0.1 | G ± 0.1 | W |
| 330 | 2.2 | 13 | 20.2 | 100 | 8.5 | 13.1 | 8 |
| 330 | 2.2 | 13 | 20.2 | 100 | 12.5 | 17.1 | 12 |
| 330 | 2.2 | 13 | 20.2 | 100 | 17.0 | 21.1 | 16 |
| 330 | 2.2 | 13 | 20.2 | 100 | 24.5 | 29.1 | 24 |
| 330 | 2.2 | 13 | 20.2 | 100 | 32.5 | 37.0 | 32 |
| 330 | 2.2 | 13 | 20.2 | 100 | 44.5 | 49.1 | 44 |
| 330 | 2.2 | 13 | 20.2 | 100 | 56.5 | 61.1 | 56 |
| 330 | 2.2 | 13 | 20.2 | 100 | 72.5 | 77.1 | 72 |
| 330 | 2.2 | 13 | 20.2 | 100 | 88.5 | 93.1 | 88 |



RoHS COMPLIANT

| | | | | |
|---|---|-----------|--------------|---|
| UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [MM] | DRAWN | DATE | NAME | |
| | | 9/6/2010 | LH | |
| TOLERANCES: ANGULAR: $\pm 30'$.XX = $\pm .012$ [.30] .XXX = $\pm .008$ [.20] .XXXX = $\pm .004$ [.10] | 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 |
| | INTERPRET DIMENSIONS AND TOLERANCING PER: ASME Y14.5M-2009 | | | .050" DUAL ROW MALE HEADER, SMT T&R PART NUMBER GRPB__2VWQS-M81RC |
| | SIZE | CAGE CODE | DWG. NO. | REV |
| | C | 54453 | 11575 | A |
| | SCALE: 8:1 | | SHEET 2 OF 2 | |