

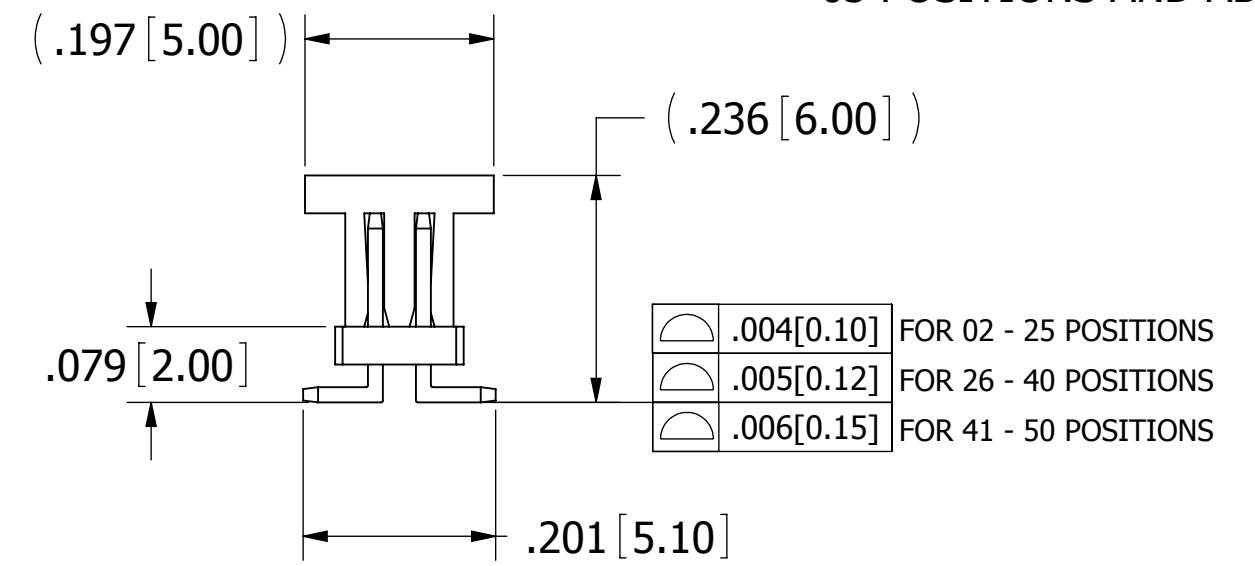
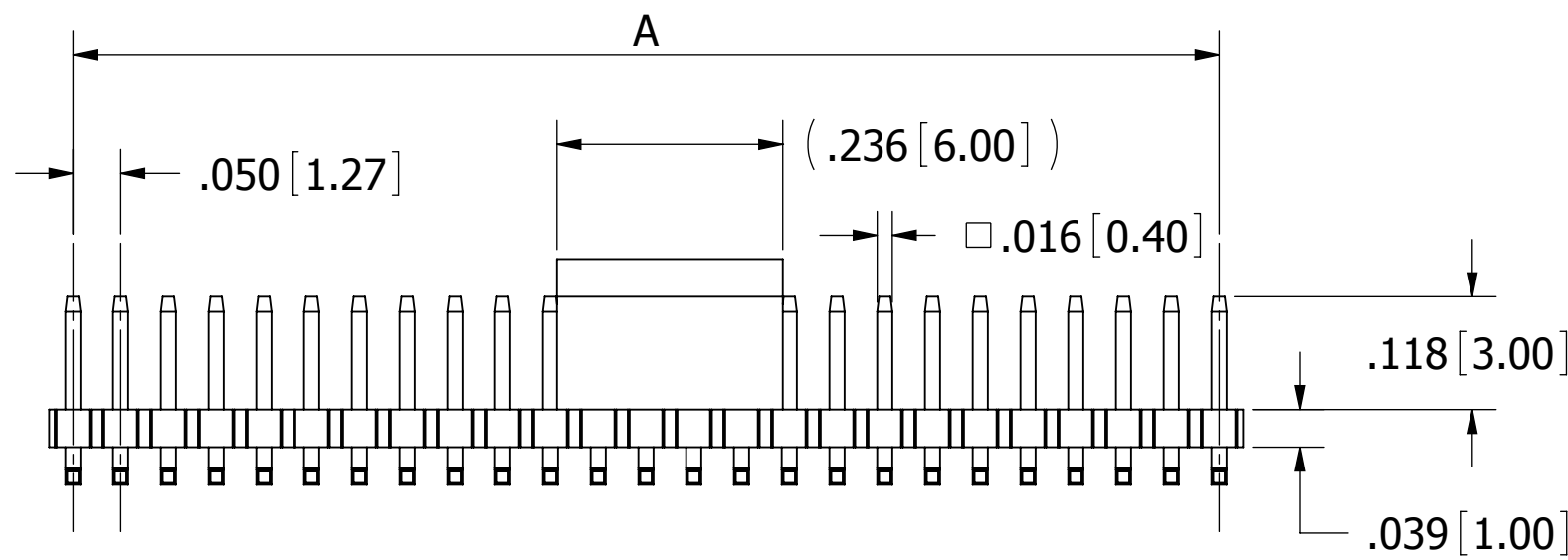
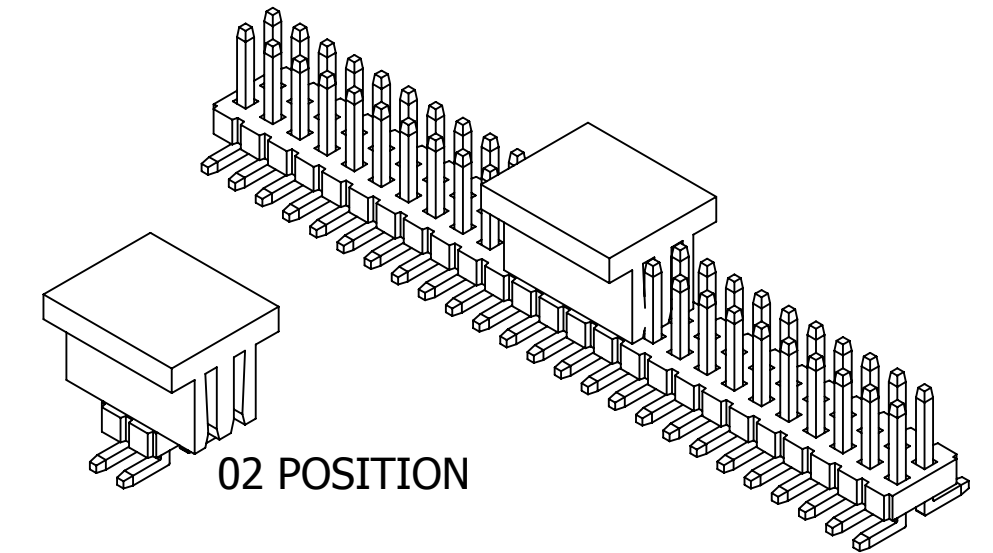
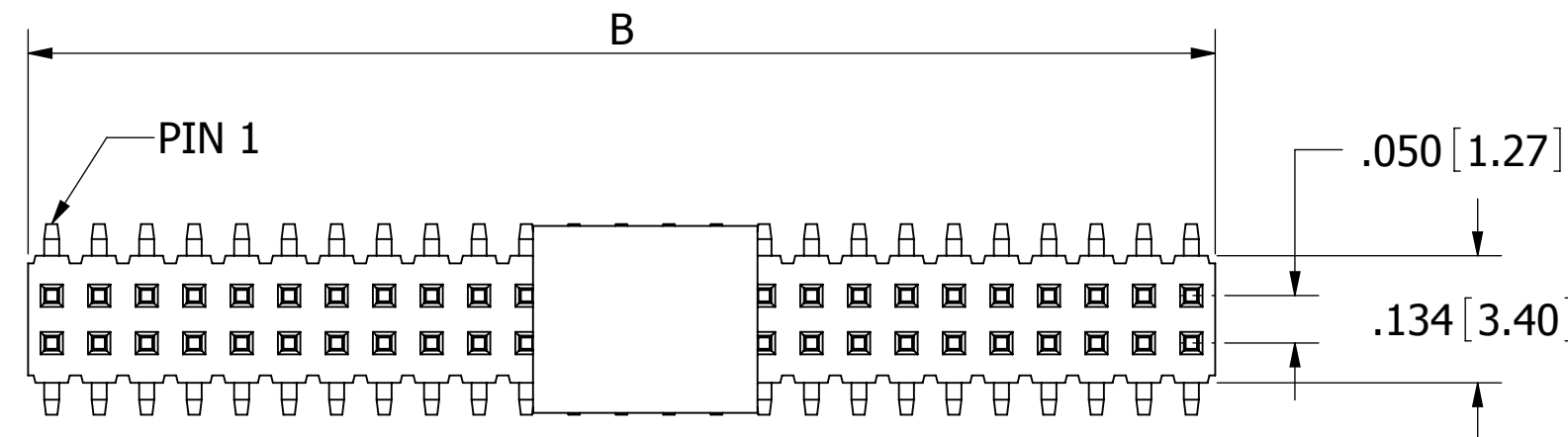
POSITIONS/ CONTACTS	A		B	
	INCH±.008	MM±0.20	INCH±.012	MM±0.30
02/04	0.050	1.27	0.100	2.54
03/06	0.100	2.54	0.150	3.81
04/08	0.150	3.81	0.200	5.08
05/10	0.200	5.08	0.250	6.35
06/12	0.250	6.35	0.300	7.62
07/14	0.300	7.62	0.350	8.89
08/16	0.350	8.89	0.400	10.16
09/18	0.400	10.16	0.450	11.43
10/20	0.450	11.43	0.500	12.70
11/22	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

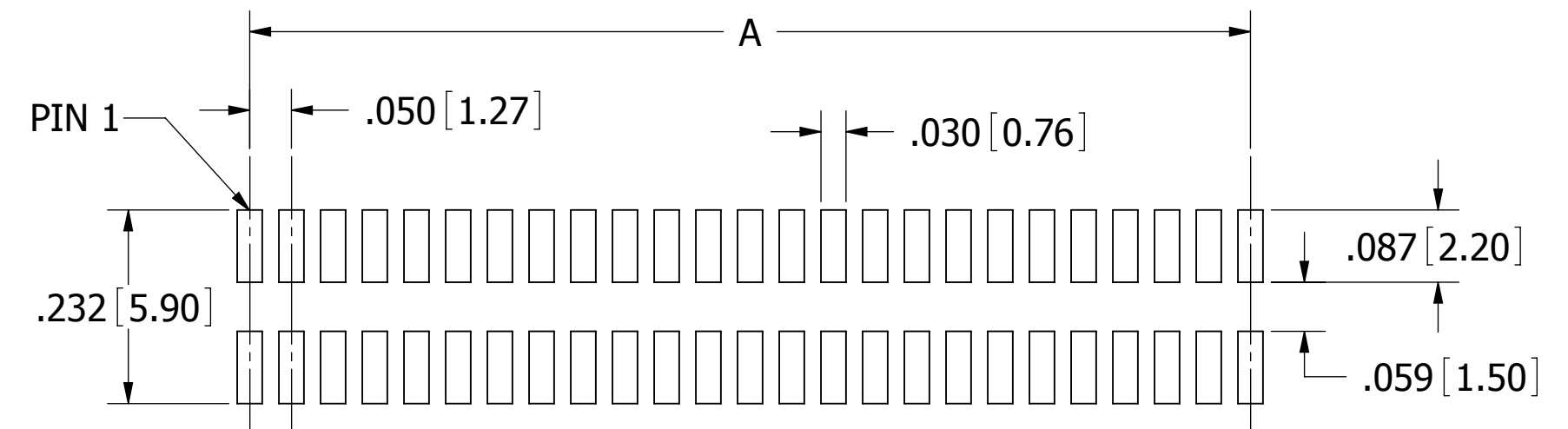
## GRPB\_\_2VWQS-M81RC

**NUMBER OF POSITIONS**  
(CONTACTS PER ROW, 02 THRU 50)

REVISIONS				
REV.	ECO. NO	DESCRIPTION	DATE	BY
A	1837	INITIAL RELEASE	09/06/2010	LH
B	3418	UPDATE TAPE DIM W, B0, F AND QTY/REEL FOR 02 POSITIONS ON SHT 2	4/13/2016	JH
C	3727	ADD 02 POSITION ISO VIEW AND TAIL COPLANAR AND WARP TOLERANCES, UPDATE TAPE & REEL 03, 05, 14 AND 22 - 37 POSITIONS 'W', 'B0', 'F' DIMENSIONS AND ADD 38 - 50 POSITIONS ON PAGE 2	08/14/2017	LH

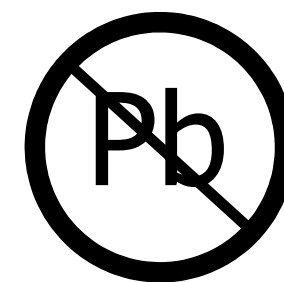


02-10, .004 [0.10] MAX.  
11-30, .008 [0.20] MAX.  
31-50, .012 [0.30] MAX.



### RECOMMENDED PCB LAYOUT

- NOTES:
- INSULATOR MATERIAL: NYLON 9T, UL 94V-0, COLOR: BLACK.
  - CONTACT MATERIAL: BRASS.
  - PLATING: .000030" MIN. NICKEL UNDERPLATE, GOLD FLASH OVERALL.
  - CURRENT RATING: 1 AMP.
  - INSULATOR RESISTANCE: 5000 MEGA OHM MIN.
  - CONTACT RESISTANCE: 20 MILLIOHMS MAX.
  - DIELECTRIC WITHSTANDING: 500 V AC.
  - OPERATING TEMPERATURE: -40° C TO +105° C.
  - PROCESSING TEMPERATURE: 230° C MAX FOR 60 SECONDS.  
(260° C MAX FOR 10 SECONDS.)
  - MODIFICATION: WITH PICK & PLACE CAP IN TAPE & REEL.

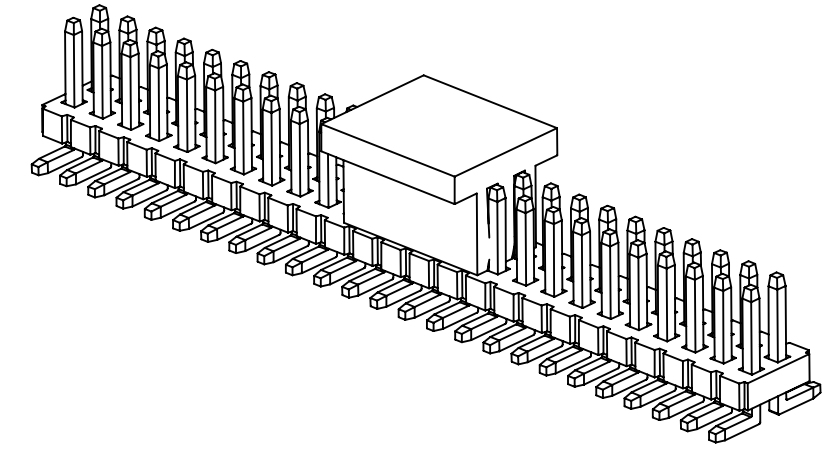


RoHS COMPLIANT

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES [MM]	DRAWN	DATE	NAME	
		09/06/2010	LH	
TOLERANCES:  ANGULAR:  DECIMALS .XX=± .012 [0.3] .XXX=± .008 [0.20] .XXXX=± .0040 [0.100]	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 .050" DUAL ROW MALE HEADER, SMT T&R
	PART NUMBER GRPB__2VWQS-M81RC			REV C
SIZE C	CAGE CODE 54453	DWG. NO. 11575	SHEET 1 OF 2	
SCALE: 8:1				

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 FOR POSITIONS 03 THRU 50  
13" REEL= 11.5 METER, 900 PIECES FOR 02 POSITIONS



DEVICE TYPE: GRPB\_2VWQS-M81RC

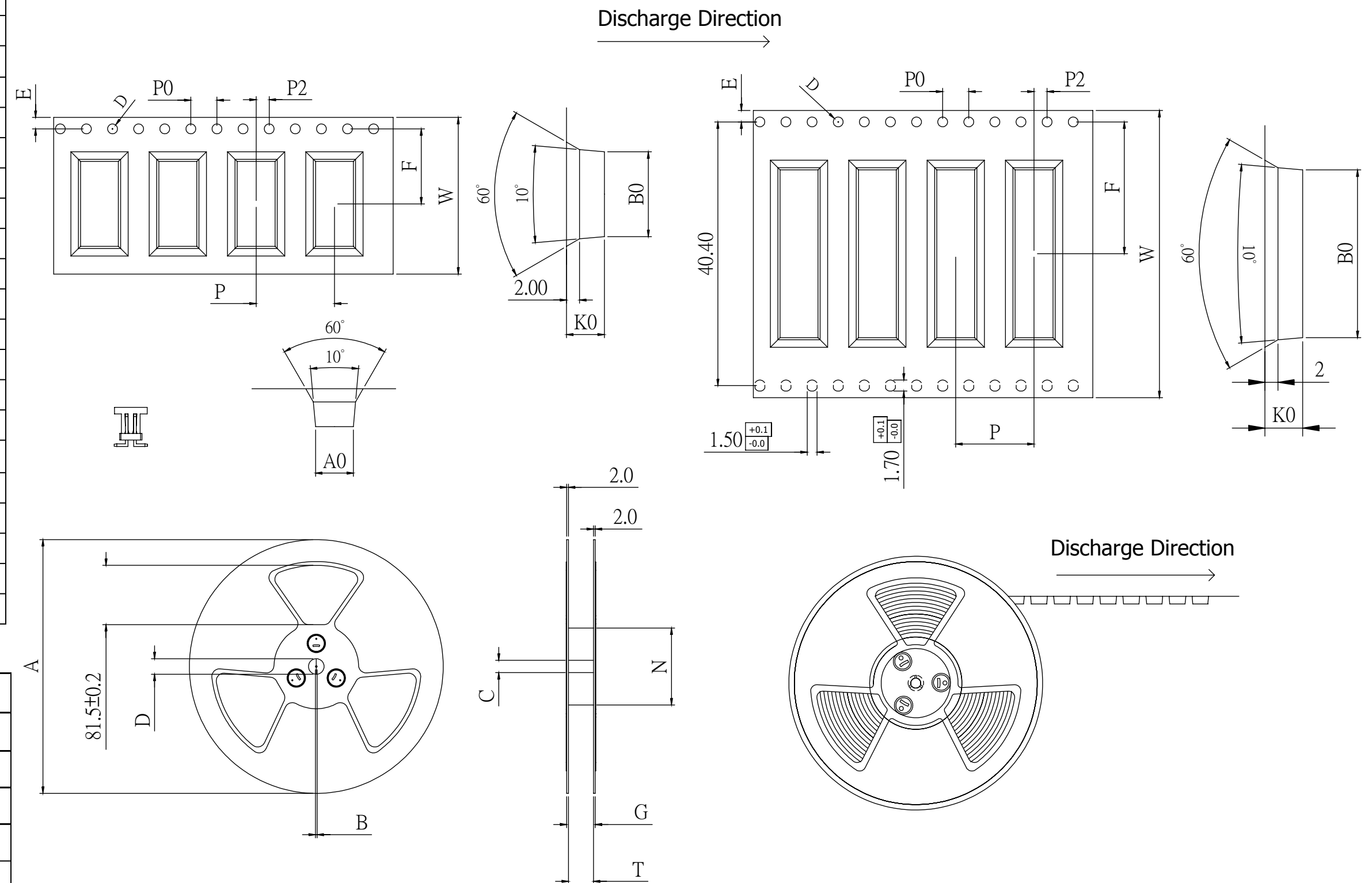
MATERIAL: P.S 0.40 BLACK

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

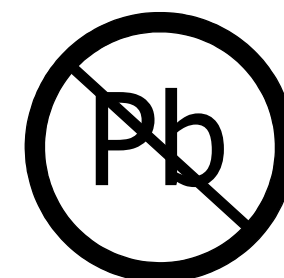
POSITIONS/ CONTACTS	DIMENSIONS (unit: mm)			POSITIONS/ CONTACTS	DIMENSIONS (unit: mm)		
	W	B0	F		W	B0	F
02/04	16	6.3	7.5	27/54	56	34.59	26.25
03/06	16	4.10	7.5	28/56	56	35.86	26.25
04/08	16	5.38	7.5	29/58	56	37.13	26.25
05/10	24	6.65	11.5	30/60	56	38.40	26.25
06/12	24	7.92	11.5	31/62	56	39.67	26.25
07/14	24	9.19	11.5	32/64	56	40.94	26.25
08/16	24	10.46	11.5	33/66	72	42.21	34.25
09/18	24	11.73	11.5	34/68	72	43.48	34.25
10/20	24	13.00	11.5	35/70	72	44.75	34.25
11/22	32	14.27	14.25	36/72	72	46.02	34.25
12/24	32	15.54	14.25	37/74	72	47.29	34.25
13/26	32	16.81	14.25	38/76	72	48.56	34.25
14/28	44	18.08	20.25	39/78	72	49.83	34.25
15/30	44	19.35	20.25	40/80	72	51.10	34.25
16/32	44	20.62	20.25	41/82	72	52.37	34.25
17/34	44	21.89	20.25	42/84	72	53.64	34.25
18/36	44	23.16	20.25	43/86	72	54.91	34.25
19/38	44	24.43	20.25	44/88	72	56.18	34.25
20/40	44	25.70	20.25	45/90	72	57.45	34.25
21/42	44	26.97	20.25	46/92	88	58.72	42.25
22/44	44	28.24	20.25	47/94	88	59.99	42.25
23/46	44	29.51	20.25	48/96	88	61.26	42.25
24/48	56	30.78	26.25	49/98	88	62.53	42.25
25/50	56	32.05	26.25	50/100	88	63.80	42.25
26/52	56	33.32	26.25				

TYPE 1 : FOR POSITION NUMBER 02 THRU 10  
(TAPE WIDTH <32 mm)

TYPE 2 : FOR POSITION NUMBER 11 AND ABOVE  
(TAPE WIDTH  $\geq 32$  mm)



DIMENSIONS (unit: mm)							CARRIER TAPE
A	B $\pm 0.5$	C $\pm 0.2$	D $\pm 1.0$	N $\pm 1.0$	T $\pm 0.1$	G $\pm 0.1$	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	
		09/06/2010	LH	
TOLERANCES:  ANGULAR:  DECIMALS .XX= $\pm .012$ [0.3] .XXX= $\pm .008$ [0.20] .XXXX= $\pm .0040$ [0.100]	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 .050" DUAL ROW MALE HEADER, SMT T&R
	PART NUMBER GRPB_2VWQS-M81RC			REV C
	SIZE C	CAGE CODE 54453	DWG. NO. 11575	SHEET 2 OF 2
SCALE: 8:1				