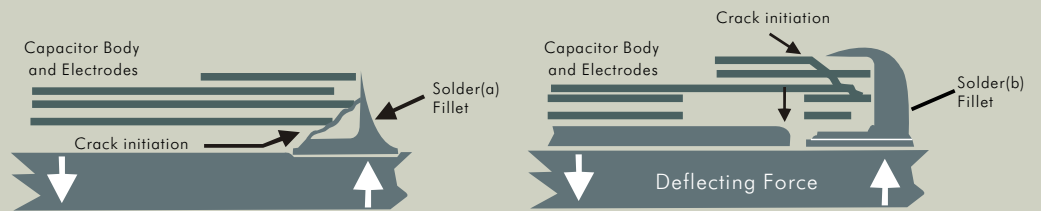


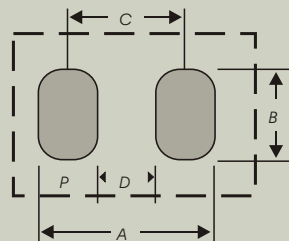
## MECHANICAL DAMAGE

- 1) Board flexure cracks are common observed, especially manual breaking process is involved or large degree of PCB warpage exists at machine level handling.
- 2) The flexure crack can be eliminated by putting sensitive parts away from the high stress area. Position and orientation of the parts should be very important.



## SOLDER PAD DESIGN GUIDES

(in case more details required, please refer to IPC 782 A)



Unit:mm

Chip	IR Reflow					Wave Solder				
	A	D	B	P	C	A	D	B	P	C
*0402	1.70	0.50	0.50	0.60	1.1	N/A				
*0603	2.30	0.70	0.75	0.80	1.5	3.10	0.70	0.75	1.20	1.90
0805	3.00	1.00	1.25	1.00	2.0	4.10	1.00	1.25	1.50	2.50
1206	4.00	2.00	1.60	1.00	3.0	5.00	2.00	1.60	1.50	3.50
1210	4.00	2.00	2.50	1.00	3.0	5.00	2.00	2.50	1.50	3.50
1808	5.60	3.60	2.00	1.00	4.6	N/A				
1812	5.60	3.60	3.00	1.00	4.6	N/A				

Note: \*to minimize tombstoning for small chips 0402, 0603, four methodologies can be used

- 1) Make all corners of the pad to round shape as above figure
- 2) Reduce the amount of solder paste using, a stencil opening which is less than the pad area
- 3) 130~160°C pre-heating temperature for more than 1 minute
- 4) Control the pad size as small as possible