When designing the hole spacing and hole diameters on a PC board, the board designer needs to have the hole spacing match the lead spacing of the selected capacitor. At no time is a capacitor to be forcibly inserted into unmatched lead hole spacing. By doing so the stress put on the capacitor can lead to end seal failure, electrolyte leakage and electrical failures.

When the lead spacing of the capacitor does not match the hole spacing, the capacitor should have its leads formed to avoid exposing the capacitor to excessive mechanical stress.

To determine if a capacitor needs lead forming, the angle of the leads in the circuit board needs to be determined. If the angle of the leads is greater than 30°, lead forming will be required.

The maximum amount of lead stress should be limited to 1.0 Kg in the vertical direction and 0.5Kg in the horizontal direction.

Circuit patterns should not be located under a capacitor due to electrolyte leakage or evaporation can lead to a short circuit.