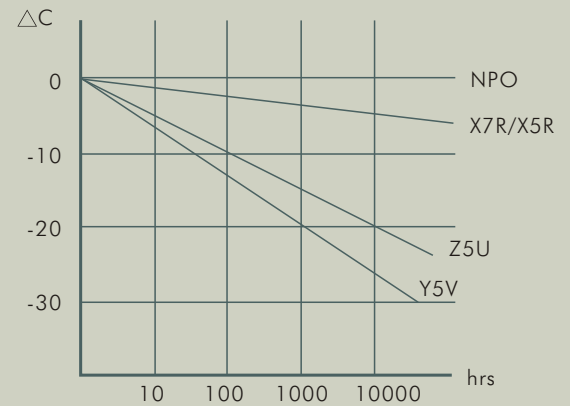


What is aging of class II ceramic (change of capacitance accompany to time)
 Aging is the Shelf-Loss in capacitance that occurs accompany to time and is a normal process Of class II. Ceramic body is cool from its CURIE POINT at 150°C and without voltage Applied , then the aging starts under a given ratio designated by vendor.

THE AVERAGE AGING RATIO(PER 10X TIME DACADE)

NPO=0
 X7R,X5R=2.5%
 Z5U=5%
 Y5V=7%



RECOVERY OF AGING-(DEAGING)

- 1)heat-up the device at 150°C or above, the higher temperature the less time required.
- 2)Voltage slows very much the aging behaviors of class II ceramic capacitors.

HANDLING GUIDELINES OF AGING PART

- 1)The aging parts will not lead to any reliability issue, but capacitance out from its lower limit which might be observed prior to production.
- 2)After de-aging process, the parts would back to its initial designated level of capacitance characteristic and another aging cycle begins when parts turn back to the storage shelf.
- 3)Typically, a process of IR reflow or wave soldering can easily recure the aging part since it all working at much higher temperature than 150°C, even few seconds dwelling time is far enough for staying at such 210°C~260°C range.
- 4)Remeasurement of de-aging parts, must to wait at least 24 hours at room temperature.
 While the part has cool down, then the capacitance is stable and shall be well within its nominal limit.