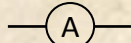


# Polymer or High Cap MLCC?

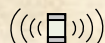
## Fast Facts

### One Amp or More



Higher current applications favor polymer caps due to the higher delivered capacitance

### What is that Noise?



Polymer is the ideal choice for applications sensitive to MLCC acoustic noise issues.

### Lowest BOM Cost

\$\$\$ => \$\$

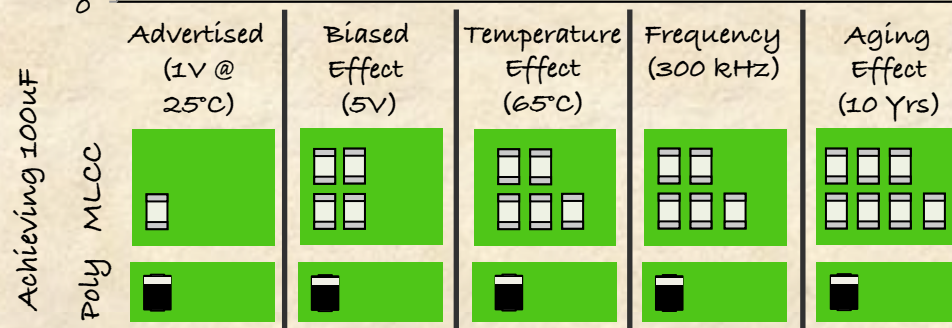
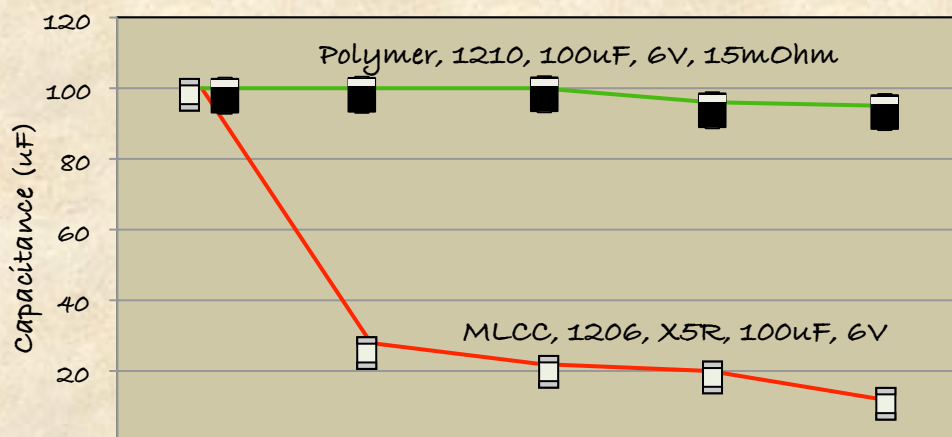
High cap MLCC banks exceeding 3-4 pcs will typically exceed the cost of a polymer solution.

### Less is More

100uF = 33uF

When replacing MLCCs with polymer, less than half to one third of the MLCC's cap value is needed.

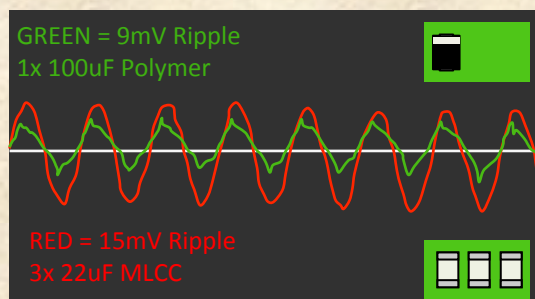
## Getting 100uF of capacitance on the board



## Bill of Material

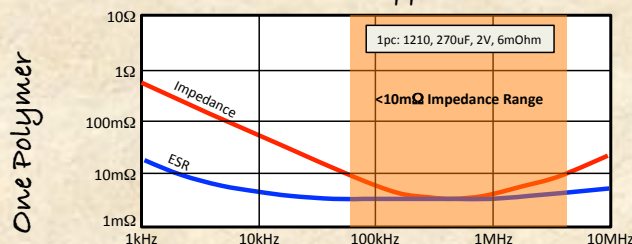
| Total Cost | Part Number Option         | #pcs | ASP | Total     | w/ Pick/Place |
|------------|----------------------------|------|-----|-----------|---------------|
|            |                            |      |     | Part Cost | (~.01 per)    |
|            | MLCC, 1206, X5R, 100uF, 6V | 7    | .04 | .28       | .35           |
|            | Polymer, 1210, 100uF, 6V   | 1    | .14 | .14       | .15           |

## Improved Voltage Stability



While MLCCs deliver lower ESR, the lower capacitance can result in higher ripple.

## Broad Band Applications



MLCCs have a narrow "sweet spot" for low impedance while polymer has a wide frequency range an ideal choice for BB apps.

