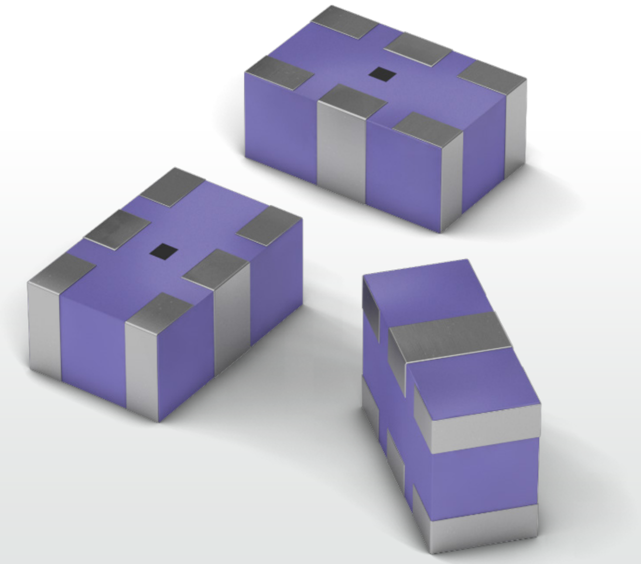
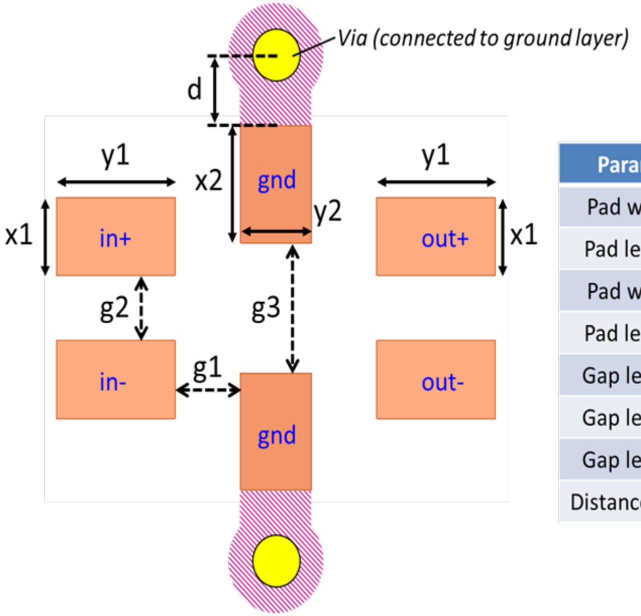
WE-CCMF Footprint Design Guideline

EMC & Inductive Solutions



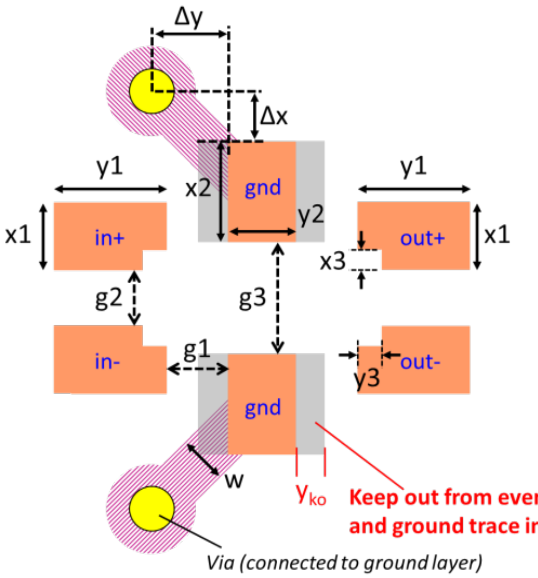
Standard Footprints

Standard footprint
with straight ground traces



Parameter	Value
Pad width x1	0.3 mm
Pad length y1	0.5 mm
Pad width x2	0.45 mm
Pad length y2	0.28 mm
Gap length g1	0.275 mm
Gap length g2	0.25 mm
Gap length g3	0.5 mm
Distance to via d	0.35 mm

Standard footprint
with oblique ground traces
(footprint compatible with 0402 resistor array)



Keep out from everything except for the ground pad and ground trace in this footprint

Parameter	Value
Pad width x1	0.330 mm
Pad length y1	0.625 mm
Pad width x2	0.450 mm
Pad length y2	0.200 mm
Etch length y3	0.116 mm
Etch length x3	0.075 mm
Gap length g1	0.200 mm
Gap length g2	0.250 mm
Gap length g3	0.500 mm
Distance to via Δx	0.110 mm
Distance to via Δy	0.345 mm
Width of trace to via w	0.250 mm
Keep-out length y_{ko}	0.1 mm

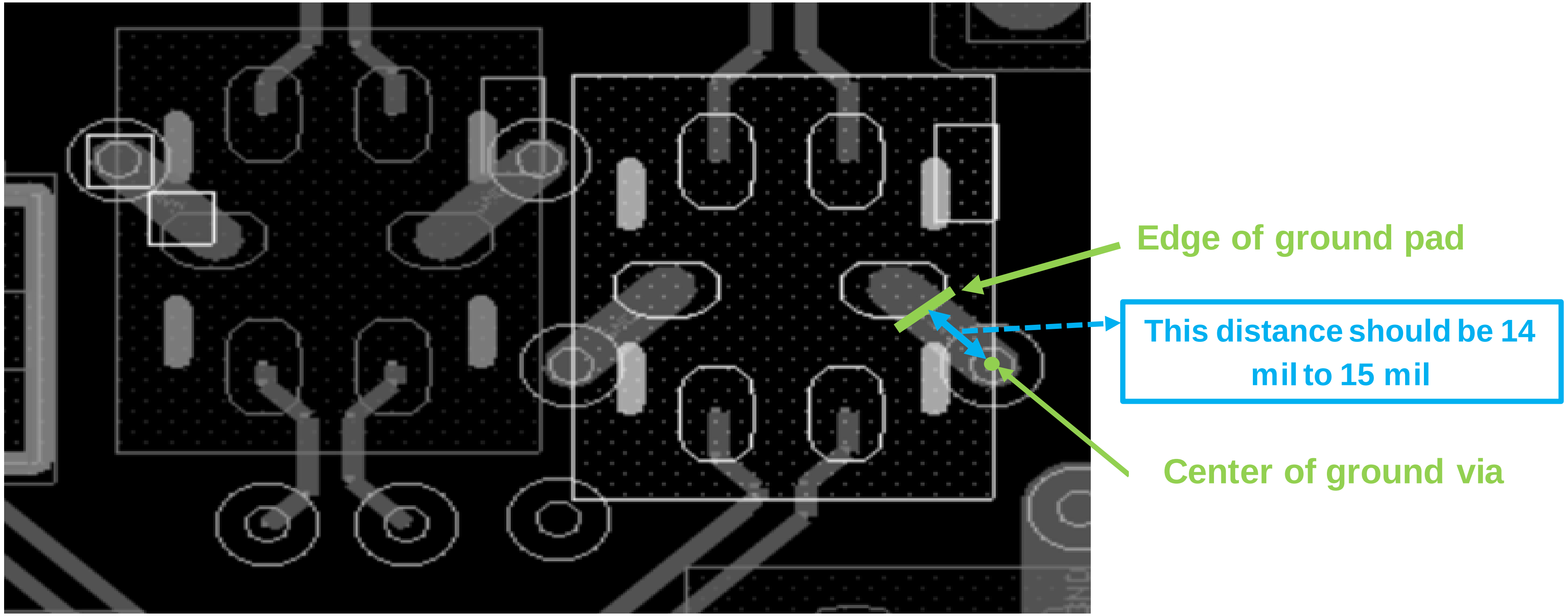
Follow one of these footprint definitions to make sure the expected function of this filter

Guidelines for the footprint

1. The optimum distance from *the center of ground via* to *the edge of ground pad* is 14 mil to 15 mil.
2. The recommended width of ground trace is 10 mil.
3. Ground pads and vias of the footprint ***should not*** connect to other surface ground.
4. Layout of the footprint should be symmetric, including the ground traces and vias.
5. Two ground pads of the footprint ***should not*** connect to each other on the surface.
6. Ground pads of the nearby footprints ***should not*** connect to the same ground via.
7. WE-CCMF is suggested to be placed as near as possible to the connector.

Guidelines for the footprint

1.The optimum distance from *the center of ground via* to *the edge of ground pad* is 14 mil to 15 mil.



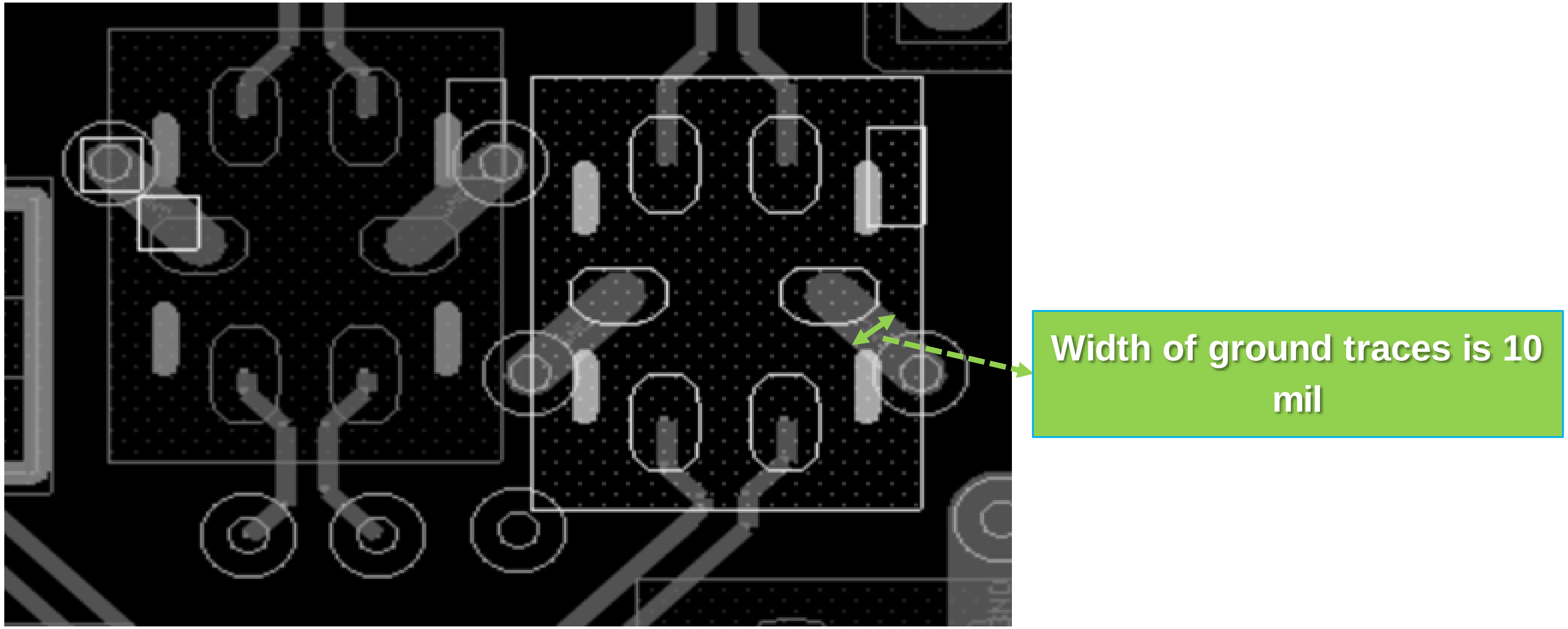
Edge of ground pad

This distance should be 14 mil to 15 mil

Center of ground via

Guidelines for the footprint

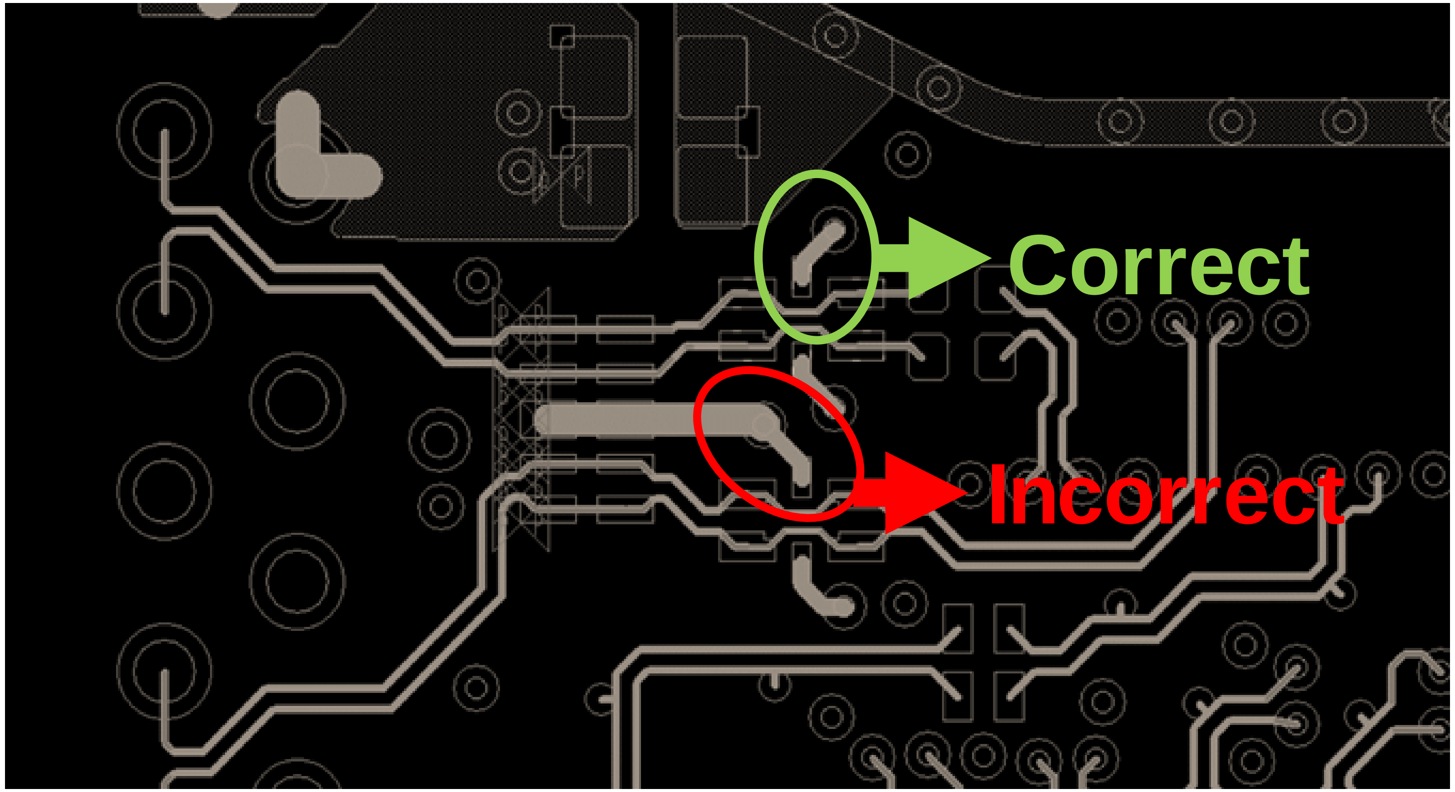
2. The recommended width of ground trace is 10 mil.



Width of ground traces is 10 mil

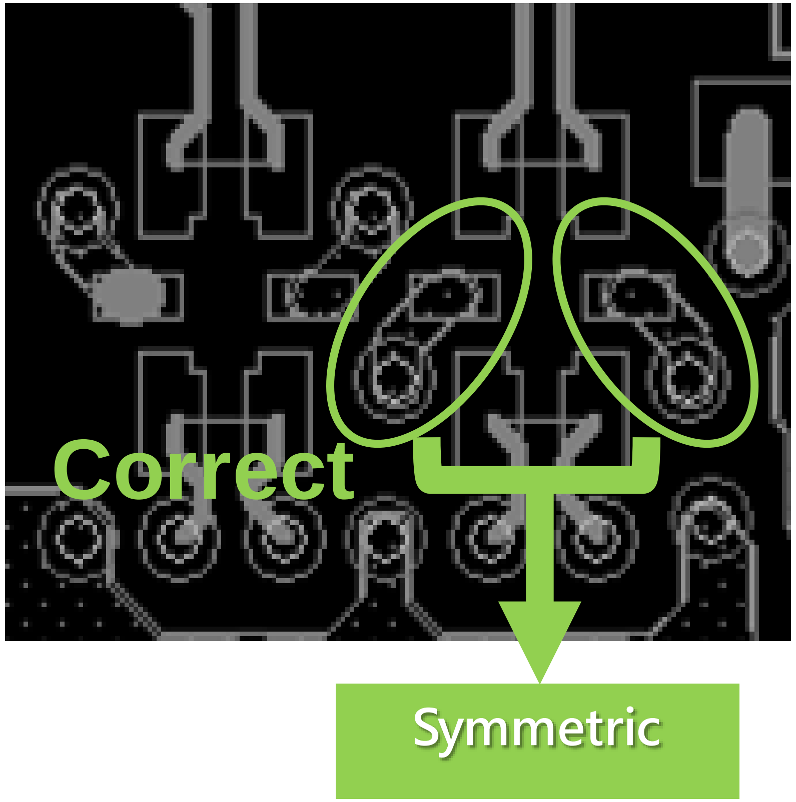
Guidelines for the footprint

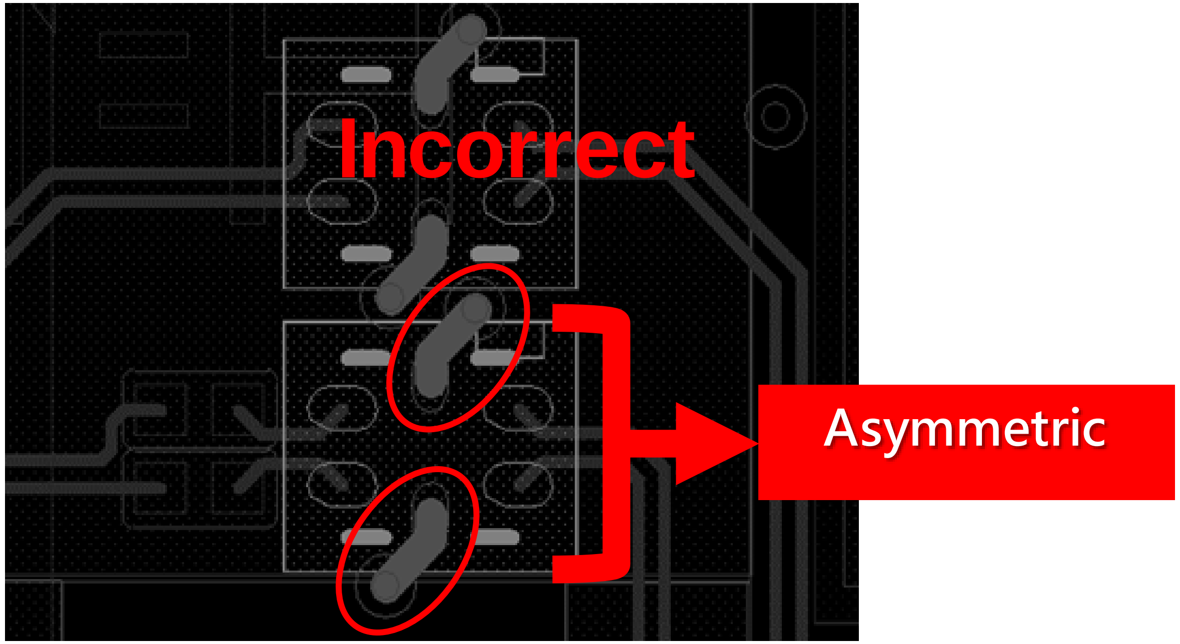
3. Ground pads and vias of the footprint ***should not*** connect to other surface grounds.



Guidelines for the footprint

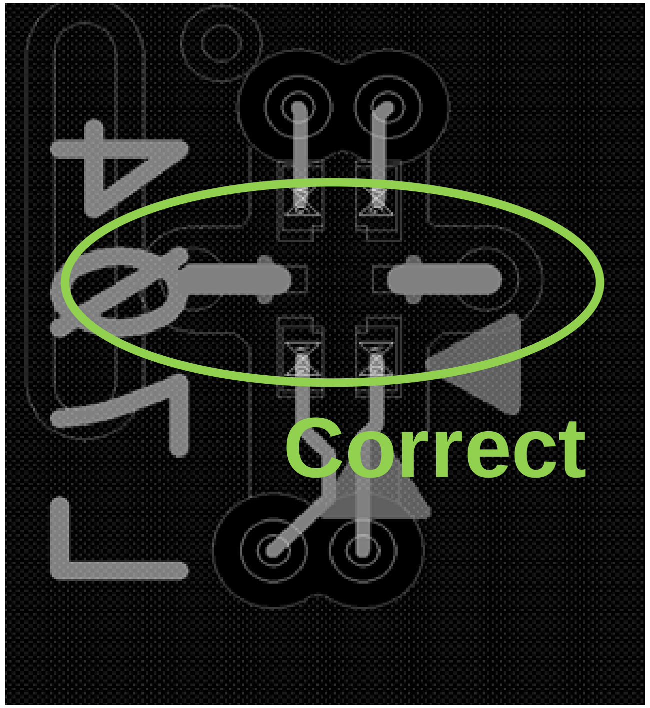
4. Layout of the footprint should be **symmetric**, including the ground traces and vias.

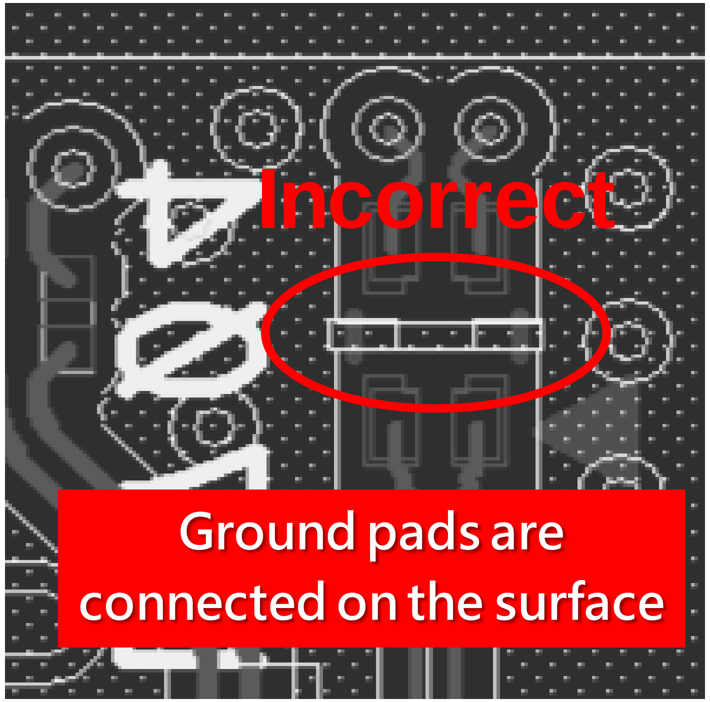




Guidelines for the footprint

5. Two ground pads of the footprint ***should not*** connect to each other on the surface.

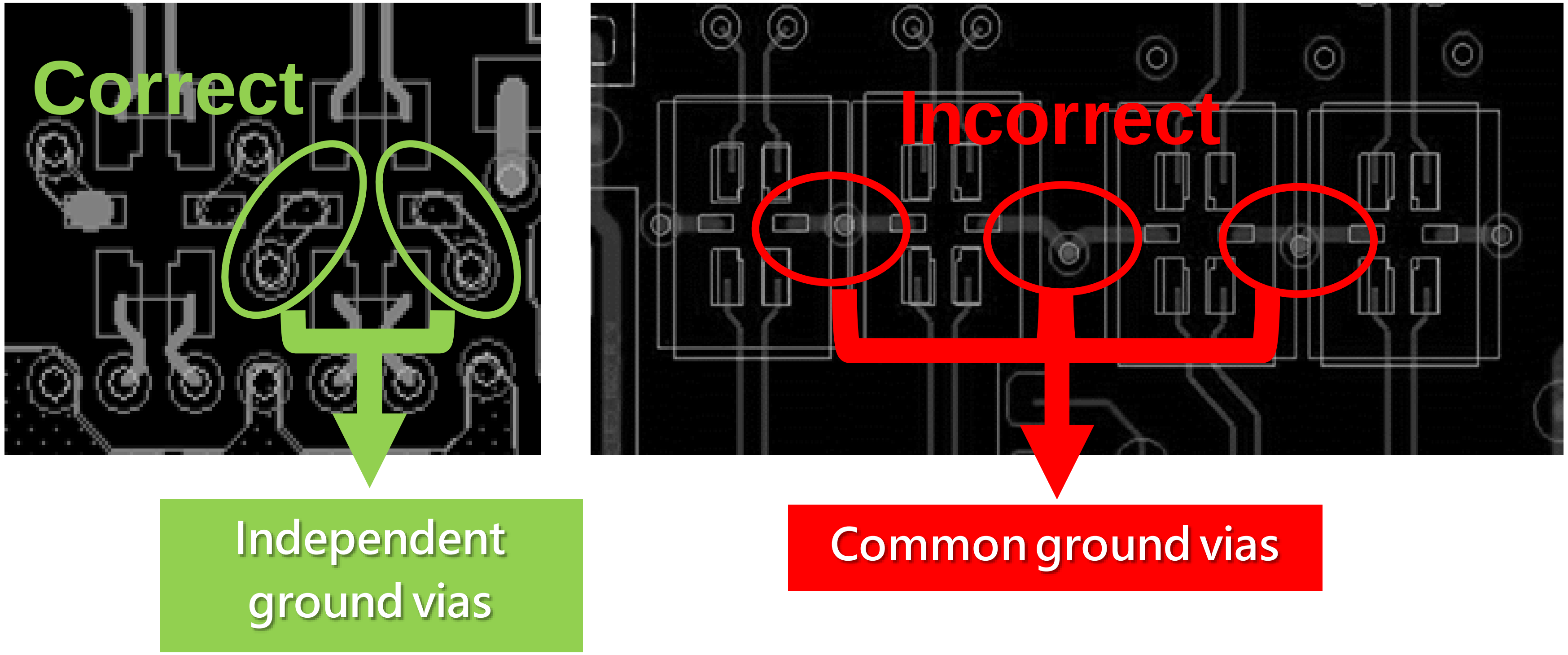




Ground pads are connected on the surface

Guidelines for the footprint

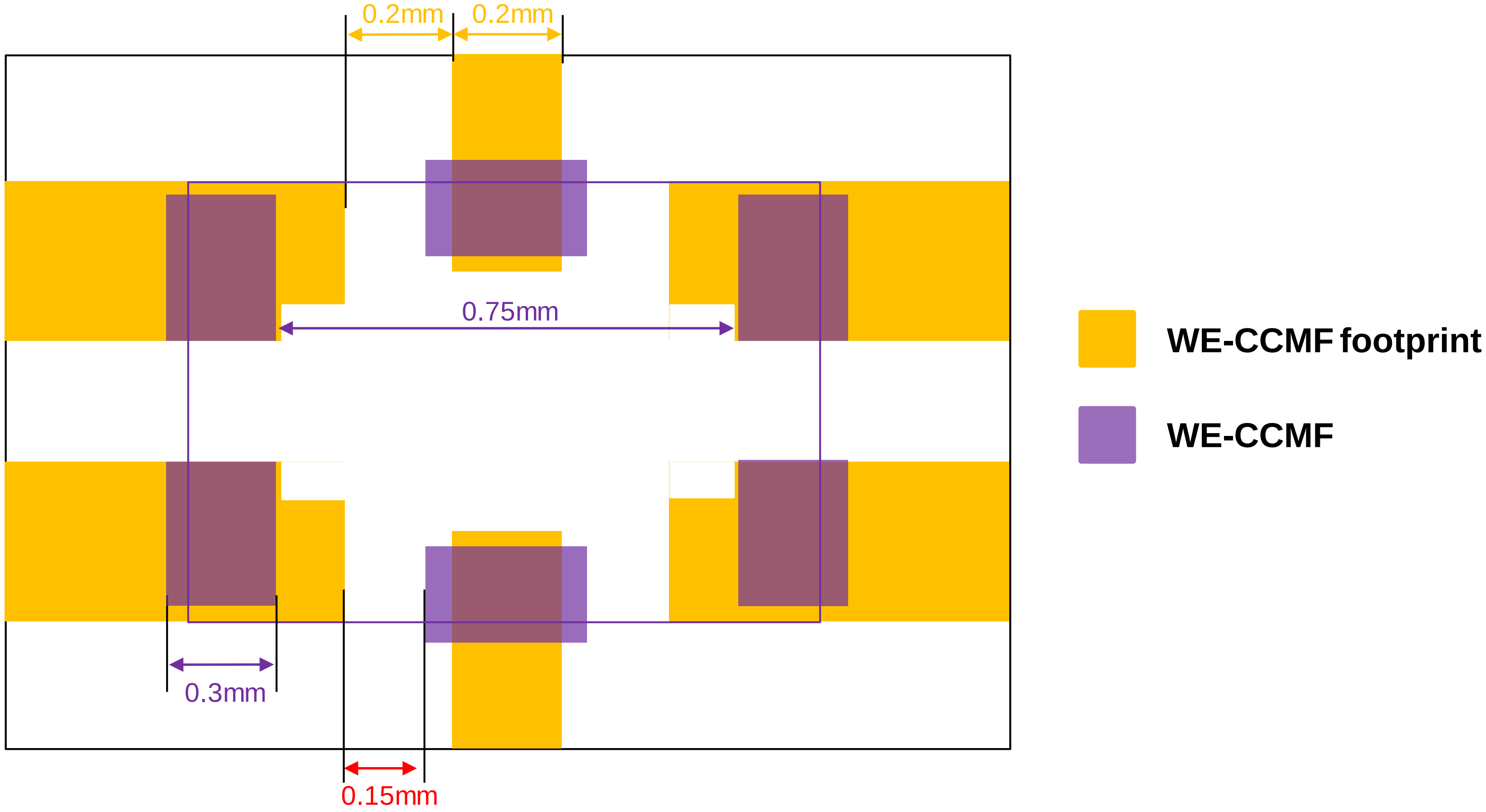
6. Ground pads of the nearby footprints ***<u>should not</u>*** connect to the same ground via.



Independent ground vias

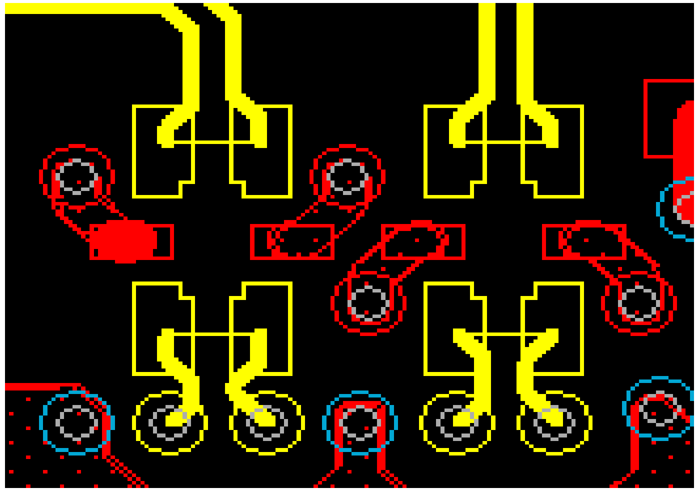
Common ground vias

WE-CCMF with footprint

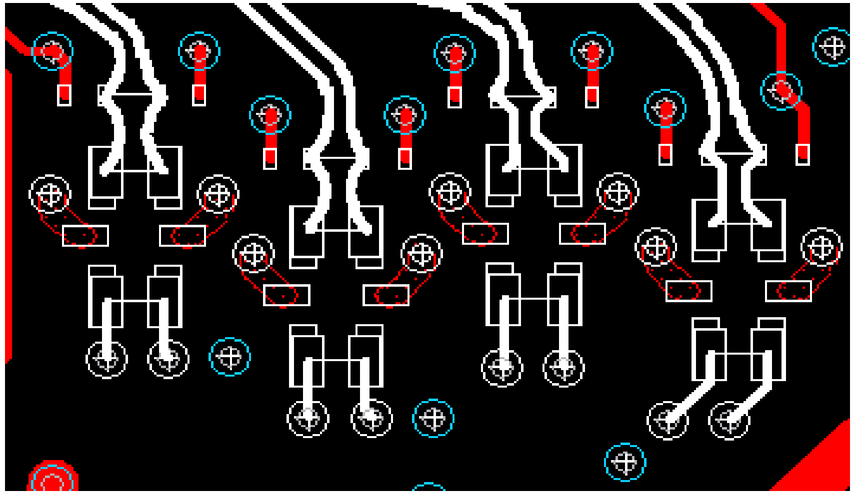


WE-CCMF footprint applications

USB3 Type-A



USB3 Type-C



EDP for UHD