

HOW TO VISUALLY DISTINGUISH HORIZONTAL V. VERTICAL ELECTRODE ORIENTATION ON R05G CAPACITORS
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On R05G series capacitors, Johanson changed the color of the top and bottom layer of the ceramic body. Colors vary for high and low capacitance because different material sets are used in manufacture. Since color variation can be subtle, a practical way to visually determine electrode orientation on these very small parts is to align a random group of capacitors (shown in Figure A).

To determine orientation:

1. Prepare 3 pieces for analysis.
2. Use a tray or fixture capable of holding the R05G capacitors to keep stationary.
3. Under a microscope, align the capacitors as shown on Figure A (preferably on a white background).
4. Note the color differences and compare each capacitor to its neighbor by turning over each R05G alternatively. Positioning the capacitors next to a group helps distinguish the differences in color.
5. Refer to Figure B for the color and corresponding orientation.

For example: If a capacitor with 1.8 pF value is soldered in the circuit board with the gray side facing up, orientation is vertical. If green side is facing up, orientation is horizontal.



Figure A

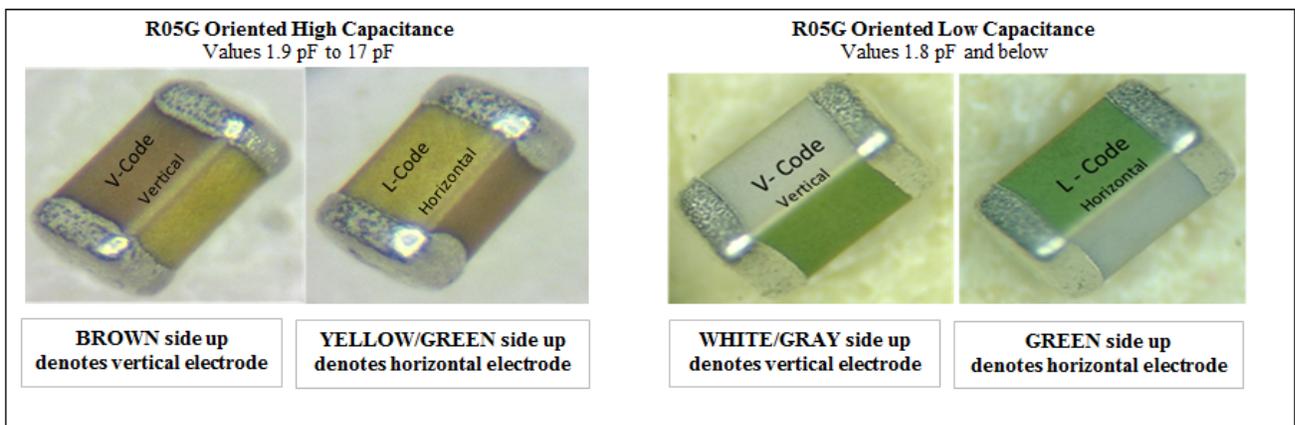


Figure B