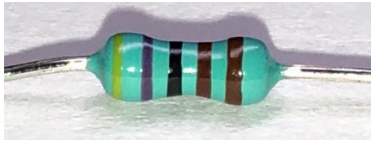


# DIY Particle Detector v1.2 - overview of electronic components

## 4-diode variant for detecting mostly electrons/beta radiation

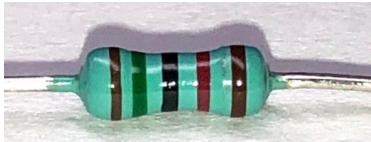
### Resistor values in Ohm:

R1 4k7 (4.7 k)



yellow purple black brown (brown)

R2 15 k



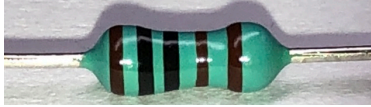
brown green black red (brown)

R3 10 M



brown black black green (brown)

R4 1 k



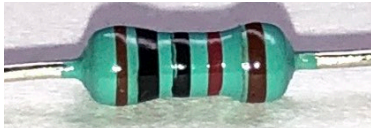
brown black black brown (brown)

R5 100 k



brown black black orange (brown)

R6, R7 10 k



brown black black red (brown)

R8 must be shorted with a wire  
(0 Ohm)

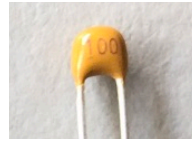
R9 2k2 (2.2 k)



red red black brown (brown)

### Capacitor values in Farad:

C1, C2, C6 10 p



marking: 100

C3, C4, C5, C7, C10 100 n



marking: 104

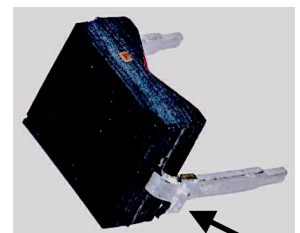
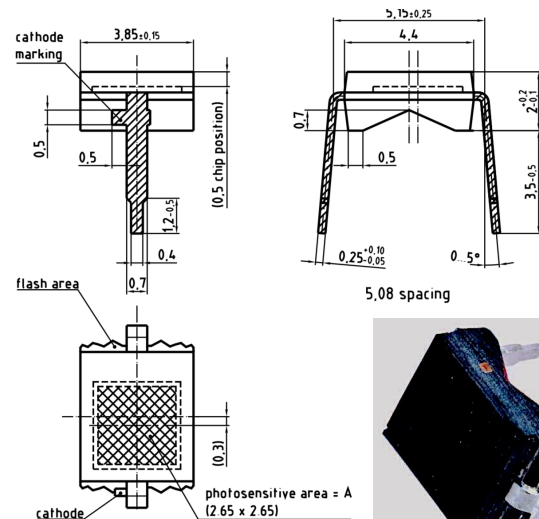
C8 47 u



polarity: short pin = minus, long pin = plus

C9 is not needed in this variant  
(leave empty and do not populate)

### D1 - D4 Silicon PIN Diode BPW34 F



polarity: pin with notch = cathode

### U1 Dual operational amplifier TLE2072 CP



pin 1 (also marked with circle)

Check the schematic for general notes.  
[www.github.com/ozel/DIY\\_particle\\_detector](https://www.github.com/ozel/DIY_particle_detector)