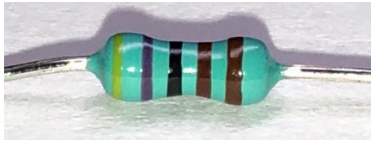


DIY Particle Detector v1.2 - overview of electronic components

1-diode variant for measuring energy of alpha particles and electrons

Resistor values in Ohm:

R1, R4 4k7 (4.7 k)



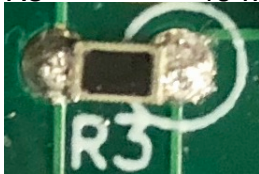
yellow purple black brown (brown)

R2 15 k



brown green black red (brown)

R3 40 M



black SMD resistor
(SMD = Surface Mounted Device)

R5 1 M



brown black black orange (brown)

R6, R7, R8 10 k



brown black black red (brown)

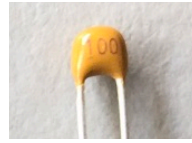
R9 2k2 (2.2 k)



red red black brown (brown)

Capacitor values in Farad:

C1, C2 10 p



marking: 100

C3, C5, C7, C10 100 n



marking: 104

C4

C6

C9



470 n
(474)



3n3
(332)



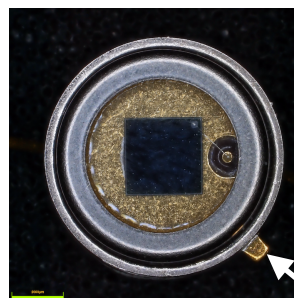
6n8
(682)

C8 47 u



polarity: short pin = minus, long pin = plus

D1 or D2: Silicon PIN Diode BPX61



anode

polarity: pin with notch = anode
destroy the glass window carefully by
cutting into the metal case with pliers

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