

open_rad_detector

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|----------------|---|-------------|---------------------|--|-------------------|---|--------------------|-------------------------------|-------------------------------------|-------------------------|--|
| Source | open-radiation-detector/Detector_PCB_0.9/open_rad_detector.sch | | | | | | | | | | |
| Kicad Rev | Eeschema 4.0.6-e0-6349-52-ubuntu16.10.1 | | | | | | | | | | |
| Generated Date | mar 17 oct 2017 10:54:59 CEST | | | | | | | | | | |
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| Title | Open Radiation Detector | | | | | | | | | | |
| Revision | 0.9 | | | | | | | | | | |
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| | https://creativecommons.org/licenses/by-sa/4.0/ | | | | | | | | | | |
| | https://hackaday.io/project/27508-open-radiation-detector/ | | | | | Total cost: | 15 | € | (buying a single component of each) | | |
| | | | | | | | | | | | |
| Reference | Value | Library | Library Ref | Manufacturer | Product ID | Provider | €/pc (17 oct 2017) | | | | |
| J1 | Outer_Shield | device | RF_Shield_One_Piece | Laird | BMI-S-107 | http://www.mo | 3.9 | | | | |
| BZ1 | Buzzer | device | Buzzer | Buzzer is not working yet. Please wait for the next version. | | | 1 | (link pending) | | | |
| C1 | 10u | device | C | Any 1206 10uF capacitor | | | 0.1 | (link pending) | | | |
| C2 | 100n | device | C | Any 0805 100nF capacitor | | | 0.1 | (link pending) | | | |
| C3 | 10u | device | C | Any 1206 10uF capacitor | | | 0.1 | (link pending) | | | |
| C4 | 100n | device | C | Any 0805 100nF capacitor | | | 0.1 | (link pending) | | | |
| D1 | LED | device | LED | Any 1206 LED diode | | | 0.1 | (link pending) | | | |
| D2 | D | device | D | Any 1206 diode rectifier | | | 0.1 | (link pending) | | | |
| J2 | Electrode | conn | CONN_01X01 | AVX | 709176001511006 | http://www.mo | 0.179 | Another option: Mill-Max | http://www | 1944-0-00-15-00-00-03-0 | |
| J3 | Batt | conn | CONN_01X02 | Keystone Electronics | 82 | http://www.mo | 0.76 | Need to buy 2 (two) | | | |
| J4 | CONN_01X06 | conn | CONN_01X06 | Any 6 pin strip | | | 0.1 | (link pending) | | | |
| Q1 | FMMT734 | transistors | BC858 | Diodes Incorporated | FMMT734 | http://www.mo | 0.476 | | | | |
| Q2 | FMMT734 | transistors | BC858 | Diodes Incorporated | FMMT735 | http://www.mo | 1.476 | | | | |
| R1 | 10M | device | R | Any 1206 10Mohm resistor | | | 0.1 | (link pending) | | | |
| R2 | 10M | device | R | Any 1206 10Mohm resistor | | | 0.1 | (link pending) | | | |
| R3 | R_G | device | R | Any 0805 1k resistor | | | 0.1 | (link pending) | | | |
| R4 | R_LED | device | R | Any 0805 suitable for LED D1 (~300 ohms? Need to test) | | | 0.1 | (link pending) | | | |
| R5 | 10M | device | R | Any 1206 10Mohm resistor | | | 0.1 | (link pending) | | | |
| RV1 | R_F | device | POT | Piher | PT10MV10-104A2020 | http://www.mo | 0.518 | | | | |
| RV1 knob | Plastic knob for RV1 potentiometer | | | Piher | XBOPL5034CR | http://www.mo | 0.227 | Hand mounted on potentiometer | | | |
| SW1 | POWER | switches | SW_SPDT | C&K Components | JS202011SCQN | http://www.mo | 0.374 | | | | |
| SW2 | BUZZER | switches | SW_SPDT | C&K Components | JS202011SCQN | http://www.mo | 0.374 | | | | |
| U1 | LD1117S50TR | regul | LD1117S50TR | STMicroelectronics | LD1117S50TR | http://www.mo | 0.383 | | | | |
| U2 | MCP6N11 | MCP6N11 | MCP6N11 | Microchip Technology | MCP6N11-010E/SN | http://www.mo | 1.26 | | | | |
| | Battery | | | Any A23 battery (12V), widely available in many stores | | | 2 | | | | |