

VALUE	PARTS	DESCRIPTION	MANUFACTURER PART	VENDOR PART NUMBER	UNIT PRICE (N 100)	EXT PRICE	MEASUREMENT	SOURCE
RESISTORS (THT)								
1 5.1kΩ	R1	1/2W resistor, metal film 700V	MF12C5C10F	SS-1KCAT-NT	0.0311	0.3011 0.138" Dia x 0.354" L (3.50mm x 9.00mm)	<a href="https://www.digkey.com/en/products/detail/fox-super-electronics-usa/2CC510F12168098">https://www.digkey.com/en/products/detail/fox-super-electronics-usa/2CC510F12168098</a>	
3 10kΩ	R2, R6, R9	1/4W resistor, carbon film	CF14JT10K	CF14JT10KCT-ND	0.0216	0.0645 0.091" Dia x 0.236" L (2.30mm x 6.00mm)	<a href="https://www.digkey.com/en/products/detail/fox-super-electronics-usa/1F10KCF14JT10KCT-ND1830374">https://www.digkey.com/en/products/detail/fox-super-electronics-usa/1F10KCF14JT10KCT-ND1830374</a>	
1 1kΩ	R3	1/4W resistor, carbon film	CF14JT1K	CF14JT1KCT-ND	0.0215	0.0645 0.091" Dia x 0.236" L (2.30mm x 6.00mm)	<a href="https://www.digkey.com/en/products/detail/fox-super-electronics-usa/1F1KCF14JT1KCT-ND1830350">https://www.digkey.com/en/products/detail/fox-super-electronics-usa/1F1KCF14JT1KCT-ND1830350</a>	
1 750Ω	R4	1/4W resistor, carbon film	CF14JT750R	CF14JT750CT-ND	0.0215	0.0215 0.091" Dia x 0.236" L (2.30mm x 6.00mm)	<a href="https://www.digkey.com/en/products/detail/fox-super-electronics-usa/1F750RCF14JT750CT-ND1830324">https://www.digkey.com/en/products/detail/fox-super-electronics-usa/1F750RCF14JT750CT-ND1830324</a>	
1 6.2kΩ	R5	1/4W resistor, carbon film, 1% (not 0.5%)	CF14JTRK20	CF14JTRK20CT-ND	0.0215	0.0215 0.091" Dia x 0.236" L (2.30mm x 6.00mm)	<a href="https://www.digkey.com/en/products/detail/fox-super-electronics-usa/1F62KCF14JTRK20CT-ND1830359">https://www.digkey.com/en/products/detail/fox-super-electronics-usa/1F62KCF14JTRK20CT-ND1830359</a>	
1 4.7MΩ	R7	1/4W resistor, metal film, 1% (not 0.5%)	RNV14F4LM70C	RNV14F4LM70CT-ND	0.083	0.063 0.094" Dia x 0.236" L (2.40mm x 6.00mm)	<a href="https://www.digkey.com/en/products/detail/skatepole-electronics-usa/RNV14F4LM70C2665263">https://www.digkey.com/en/products/detail/skatepole-electronics-usa/RNV14F4LM70C2665263</a>	
1 6.8MΩ	R8	0.6W resistor, carbon film, 1% (not 0.5%)	BC8369CT-ND	BC8369CT-ND	0.076	0.076 0.091" Dia x 0.236" L (2.30mm x 6.00mm)	<a href="https://www.digkey.com/en/products/detail/vishay-beyschlag-diatronic-bc-components/MB802070C8369CT100503564">https://www.digkey.com/en/products/detail/vishay-beyschlag-diatronic-bc-components/MB802070C8369CT100503564</a>	
1 4.7MΩ	R10, R14	1/4W resistor, metal film	CF14JT470	CF14JT470CT-ND	0.0215	0.043 0.091" Dia x 0.236" L (2.30mm x 6.00mm)	<a href="https://www.digkey.com/en/products/detail/fox-super-electronics-usa/1F47KCF14JT470CT-ND1830358">https://www.digkey.com/en/products/detail/fox-super-electronics-usa/1F47KCF14JT470CT-ND1830358</a>	
1 12kΩ	R11	1/4W resistor, metal film 700V	VR2500000100SRJ500	VR2500000100SRJ500CT-ND	0.118	0.118 0.098" Dia x 0.256" L (2.50mm x 6.50mm)	<a href="https://www.digkey.com/en/products/detail/vishay-beyschlag-diatronic-bc-components/VR2500000100SRJ500730779">https://www.digkey.com/en/products/detail/vishay-beyschlag-diatronic-bc-components/VR2500000100SRJ500730779</a>	
1 10kΩ	R12	1/4W resistor, carbon film	CF14JT22K0	CF14JT22K0CT-ND	0.0215	0.0215 0.091" Dia x 0.236" L (2.30mm x 6.00mm)	<a href="https://www.digkey.com/en/products/detail/fox-super-electronics-usa/1F22KCF14JT22K0CT-ND1830353">https://www.digkey.com/en/products/detail/fox-super-electronics-usa/1F22KCF14JT22K0CT-ND1830353</a>	
1 5.1MΩ	R13	1/4W resistor, metal film 700V	VR25000005104JA100	VR25000005104JA100CT-ND	0.0978	0.0978 0.098" Dia x 0.256" L (2.50mm x 6.50mm)	<a href="https://www.digkey.com/en/products/detail/vishay-beyschlag-diatronic-bc-components/VR25000005104JA1007360768">https://www.digkey.com/en/products/detail/vishay-beyschlag-diatronic-bc-components/VR25000005104JA1007360768</a>	
1 20kΩ	RV1	Potentiometer, 1/2W 1.0 700V	3362P-1203LF	3362P-203LF-ND	0.7575	0.7575 0.279" x 0.260" Face (6.99mm x 6.60mm)	<a href="https://www.digkey.com/en/products/detail/bourns-usa/3362P-1203LF1203LF108417">https://www.digkey.com/en/products/detail/bourns-usa/3362P-1203LF1203LF108417</a>	
CAPACITORS (THT)								
2 10μF	C1, C3	MLCC in radial package with 0.1" lead spacing required	F7G16XSR1E106MR70C	445-F7G16XSR1E106MR70CT-ND	0.2043	0.4086 0.157" L x 0.098" W (4.00mm x 2.50mm)	<a href="https://www.digkey.com/en/products/detail/tlkc-corporation/F7G16XSR1E106MR70C7384726">https://www.digkey.com/en/products/detail/tlkc-corporation/F7G16XSR1E106MR70C7384726</a>	
1 47μF	C2	MLCC in radial package with 0.1" lead spacing required	SR152A470KAR	478-1316A-ND	0.1315	0.1315 0.150" L x 0.091" W (3.00mm x 2.54mm)	<a href="https://www.digkey.com/en/products/detail/sr152A470KAR478-1316A-ND9506806">https://www.digkey.com/en/products/detail/sr152A470KAR478-1316A-ND9506806</a>	
1 100μF ± 10000ppF	C4	Ceramic in radial package 100V 0.7" lead spacing required	K22A32ZSUJH6UJ5R	BC5213CT-ND	0.062	0.062 0.295" Dia (7.50mm)	<a href="https://www.digkey.com/en/products/detail/vishay-beyschlag-diatronic-bc-components/D103M26ZSUJH6UJ5R2830069">https://www.digkey.com/en/products/detail/vishay-beyschlag-diatronic-bc-components/D103M26ZSUJH6UJ5R2830069</a>	
1 220n ± 0.22μF	C5	Ceramic in radial package with 0.2" lead spacing required	K22AC22CT-ND	K22AC22CT-ND	0.124	0.124 0.197" L x 0.128" W (5.00mm x 3.20mm)	<a href="https://www.digkey.com/en/products/detail/vishay-beyschlag-diatronic-bc-components/K22AC2207F5UJ5R52350767">https://www.digkey.com/en/products/detail/vishay-beyschlag-diatronic-bc-components/K22AC2207F5UJ5R52350767</a>	
1 1μF	C6	Ceramic in radial package with 0.2" lead spacing required	FQ28X7R1E106MR70C	445-1817R1-ND	0.0899	0.0899 0.157" L x 0.098" W (4.00mm x 2.50mm)	<a href="https://www.digkey.com/en/products/detail/tlkc-corporation/FQ28X7R1E106MR70C7382763">https://www.digkey.com/en/products/detail/tlkc-corporation/FQ28X7R1E106MR70C7382763</a>	
1 15μF	C7	Ceramic in radial package with 0.15" lead spacing required	K15SK107RFSUJ5H	BC2871CT-ND	0.0715	0.0715 0.142" L x 0.091" W (3.50mm x 2.30mm)	<a href="https://www.digkey.com/en/products/detail/vishay-beyschlag-diatronic-bc-components/K15SK107RFSUJ5H2356706">https://www.digkey.com/en/products/detail/vishay-beyschlag-diatronic-bc-components/K15SK107RFSUJ5H2356706</a>	
1 4.7μF	C8	Ceramic in radial package with 0.2" lead spacing required (CHV)	S472M32ZSUJH6UJ5R	129	0.1444	0.1444 0.294" Dia (9.08mm)	<a href="https://www.digkey.com/en/products/detail/s472M32ZSUJH6UJ5R129PHN-ND23366604">https://www.digkey.com/en/products/detail/s472M32ZSUJH6UJ5R129PHN-ND23366604</a>	
INDUCTORS								
1 1mH	L1	Inductor, radial package	RLB0914-102KL	RLB0914-102KL-ND	0.26875	0.343" Dia (8.70mm)	<a href="https://www.digkey.com/en/products/detail/bourns-usa/RLB0914-102KL123277377V4_header-search_gsksk=Mi9uTCBdEaEoKBCGAaARqCwCwMAGkEaA5AERAB08IA">https://www.digkey.com/en/products/detail/bourns-usa/RLB0914-102KL123277377V4_header-search_gsksk=Mi9uTCBdEaEoKBCGAaARqCwCwMAGkEaA5AERAB08IA</a>	
DIODES								
1 LED	D1	Blue LED 3mm, 3.3V	WP710A10QBCC	754-1956-ND	0.151	0.151 2.90mm Dia	<a href="https://www.digkey.com/en/products/detail/leds-wp710A10QBCC754-1956-ND7698112">https://www.digkey.com/en/products/detail/leds-wp710A10QBCC754-1956-ND7698112</a>	
1 BA159	D2	Fast switching diode, DO-41 package required	BA159-E354	BA159-E354GCT-ND	0.1171	DO-205AL (DO-41)	<a href="https://www.digkey.com/en/products/detail/ba159-E354BA159-E354E2754GCT-NDQ171280">https://www.digkey.com/en/products/detail/ba159-E354BA159-E354E2754GCT-NDQ171280</a>	
IC								
1 NJM78M05FA	U1	Linear Voltage Regulator 5V at 500mA	NJM78M05FA	212N-NJM78M05FA-ND	0.7562	0.7562 220F	<a href="https://www.digkey.com/en/products/detail/nishihara-micro-devices-usa/NJM78M05FA805792">https://www.digkey.com/en/products/detail/nishihara-micro-devices-usa/NJM78M05FA805792</a>	
1 LMC555	U2	LMC555 CMOS-based 555 timer	LMC555CN	LMC555CN-NOPB	1.10575	1.10575 8-DIP (300", 7.62mm)	<a href="https://www.digkey.com/en/products/detail/linear-technology-usa/LMC555CN-NOPB32623">https://www.digkey.com/en/products/detail/linear-technology-usa/LMC555CN-NOPB32623</a>	
2 STC	U3, U4	IC Channel MOSFET 400V 400MA TO92-3	STC1HN60K9-AP	497-15648-1-ND	0.3879	0.778 2TO-92-3	<a href="https://www.digkey.com/en/products/detail/stmicroelectronics-usa/STC1HN60K9-AP326246">https://www.digkey.com/en/products/detail/stmicroelectronics-usa/STC1HN60K9-AP326246</a>	
1 LF	U5	Power converter control chip	TL5001	TL5001-ND	2.5365	8-SOP (8.300", 7.62mm)	<a href="https://www.digkey.com/en/products/detail/ti-usa/TL5001-ND1830448">https://www.digkey.com/en/products/detail/ti-usa/TL5001-ND1830448</a>	
1 2N3904	Q1	NPN Transistor, TO-92 package	2N3904BU	2N3904F5-ND	0.1169	0.1169 2TO-26-3, TO-92-3 (TO-226AA)	<a href="https://www.digkey.com/en/products/detail/2N3904BU2N3904F5-ND1413">https://www.digkey.com/en/products/detail/2N3904BU2N3904F5-ND1413</a>	
MISC								
1 SBM-20		Geiger Tube	SBM-20	SBM-20	13	13 Max Len = 106 / 101 EF Length =91.0 / 83.5 (mm)	<a href="https://www.youtube.com/watch?v=441-sbm-20.html">https://www.youtube.com/watch?v=441-sbm-20.html</a>	
2 DIP8		DIP SOCKET 8 pos	ED08BT	ED0344-5-ND	0.16283	0.32566 DIP, 0.3" (7.62mm) Row Spacing	<a href="https://www.digkey.com/en/products/detail/ED08BTED0344-5-ND1417594">https://www.digkey.com/en/products/detail/ED08BTED0344-5-ND1417594</a>	
2 CLIPS		Fuse clips to hold SBM-20		36-3533-ND	0.2635	0.527 Fuse Size, 0.25" Dia (6.35mm)	<a href="https://www.digkey.com/en/products/detail/fox-systems-electronics-usa/3630316021">https://www.digkey.com/en/products/detail/fox-systems-electronics-usa/3630316021</a>	
1 BOARD		MIT-NISE Geiger Counter Board	REV9	REV9	1.1677	1.1677 ->BOARD Counter Board	<a href="https://github.com/">https://github.com/</a>	
1 CASE		Serpac enclosure, black, clear top	052C-BK	052C-BK	7.29	7.29 56.2 x 3.25 x 1.4 in	<a href="https://www.serpac.com/usa/enclosure.html#93x56-256-12-1167-608-170x218-177-954-182-253">https://www.serpac.com/usa/enclosure.html#93x56-256-12-1167-608-170x218-177-954-182-253</a>	
1 SWITCH		SPST Circular Switch	SW-R2-1A-F-1-5	2057-SW-R2-1A-F-1-5-ND	0.4232	0.4232 Circular - 20.00mm Dia	<a href="https://www.digkey.com/en/products/detail/adam-tech-usa/SW-R2-1A-F-1-515284451">https://www.digkey.com/en/products/detail/adam-tech-usa/SW-R2-1A-F-1-515284451</a>	
1 HOLD		9V Battery holder	BA9VPC	BA9VPC-ND	1.7901	1.7901 Height Above Board 0.843" (21.4mm)	<a href="https://www.digkey.com/en/products/detail/mpd-memory-protection-devices-usa/BA9VPC2439228">https://www.digkey.com/en/products/detail/mpd-memory-protection-devices-usa/BA9VPC2439228</a>	
1 BATT		Energyizer Inductor 9V	EN22	EN22	1.431	1.431 49x46.5mm	<a href="https://us.cordis-asx.com/">https://us.cordis-asx.com/</a>	
2 SPACE		Spade Connector	90087A15	90087A15-ND	0.0038	0.1072 Length 0.5142" (12.95mm), Width 0.187" (4.75mm)	<a href="https://www.mouser.com/product-detail/90087A15/">https://www.mouser.com/product-detail/90087A15/</a>	
1 44-40x160" pin		head head threading screw	90087A15	90087A15-ND	0.1018	0.4072 44-40x160"	<a href="https://www.mouser.com/product-detail/90087A15/">https://www.mouser.com/product-detail/90087A15/</a>	
2 CONN		Female To Female spade connection wires (4.8mm)	N/A	N/A	0.467	0.934 4.8mm spade, 11.82" Length	<a href="https://us.cordis-asx.com/">https://us.cordis-asx.com/</a>	
1 AUDIO	J2	Audio Connection Jack (female) 3.5mm	44-00238	839-54-0028BCT-ND	0.8888	0.8888 3.50mm (0.141", 1/8", Mini Plug) - Headphone	<a href="https://www.digkey.com/en/products/detail/temsilati-international-corp-usa/44-0023816575628">https://www.digkey.com/en/products/detail/temsilati-international-corp-usa/44-0023816575628</a>	
OPTIONAL								
1 ESP32		ESP32-C3 DevKitC-02	ESP32-C3-DevKitC-02	368-ESP32C3-DEVKIT02	8	8		