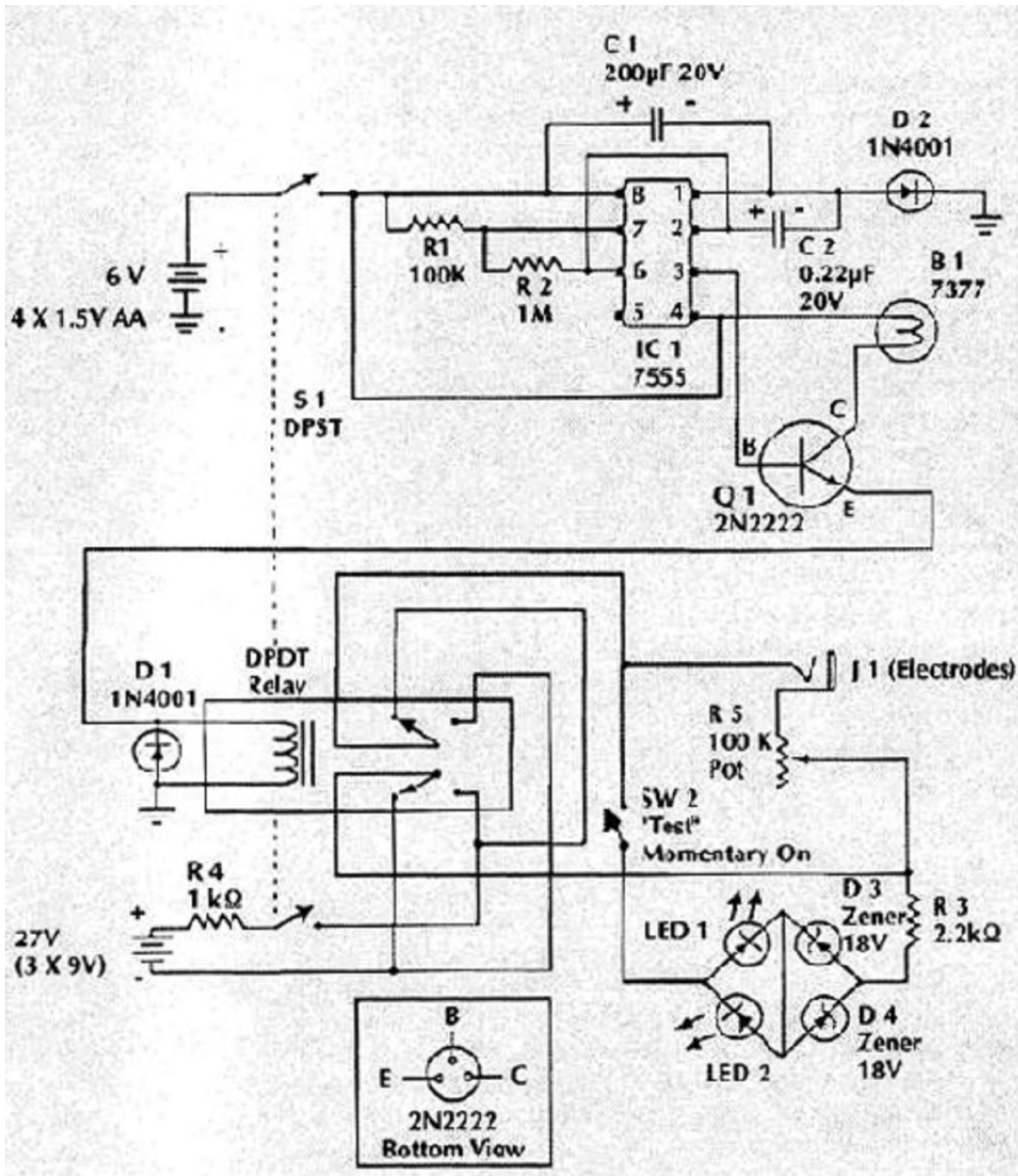


Retro Beck:

The Original Beck Zapper



PROPOSED THEORETICAL *IN-VIVO* BLOOD HIV, PATHOGEN AND PARASITE NEUTRALIZING DEVICE

COMPONENT DESCRIPTIONS, SOURCES AND CURRENT PRICES (March 1995)

Revision, March 13, 1996
by Robert C. Beck, DSc © 1991-1996

Note: These data are for theoretical, informational and instructional purposes only and are not to be construed as medical advice. Consult your licensed medical practitioner. Some builders have ego problems with following instructions (not invented here) and like to find "mistakes" or possible "improvements". Hundreds of devices have been built successfully, if duplicated exactly as shown. Do not expect this device to function optimally if any electrical changes or ego improvements are attempted.

7555 CMOS timer chip (generic)		IC1	\$ 1.80	
100 k ohm (Ω) 3 watt (W) 5% resistor		R1	.07	
1 meg Ω 3 W 5% resistor		R2	.07	
2.2 k Ω 3 W 5% resistor		R3	.07	
1 k Ω 3 W 5% resistor		R4	.07	
100 k Ω linear taper pot, 1/2 watt Caltronics P-68		R5	2.56	
200 μ F 20 V (or higher) electrolytic capacitor		C1	.45	
0.22 μ F 20 V (or higher) tantalum capacitor		C2	.25	
1N4001 diode	2 required @ .15	D1 & D2	.30	
18 V Zener diodes, 1/2 watt	2 required @ .79	D3 & D4	1.58	(NTE5027A)
NPN transistor, generic 2N2222		Q1	.30	
Bulb, 6.3 V 0.75 A, type 7377		B1	1.34	
Relay, 5 V 50 Ω coil PCB Mount DPDT Selecta Switch SR15P207D1			5.45	
Misc. wire, solder, etc.			.50	
Custom-printed circuit board #PS-PCB			15.00	

Note: All 15 components listed above are available at Action Electronics, 1300 E. Edinger, Santa Ana CA 92705, USA, telephone (714) 547 5169. They also have a complete kit available for about \$80.00.

Bicolor LED red/green, Radio Shack #276-012		LED1	\$ 1.19	
Jack for electrode leads, #274-251, 3 for \$1.59		J1	.53	
DPDT switch, #275-626 or equiv. (used as DPST)		SW1	2.55	
SPST Submini momentary push button switch		SW2	.59	(ER-SW101 "Test")
Battery holder, 4 AA cells, Radio Shack #270-383			1.29	
4 Alkaline AA cell batteries, #23-552			2.89	
3 Alkaline 9-V batteries, type 1604, etc.			3.75	
3 9-V battery snaps (clip-on connectors), #270-325, pkg 5 for \$1.29			1.29	
Box, if used			2.29	

Note: The above items are generally available at local Radio Shack stores.

Lead wire with 3.5 mm plug, 6 ft. Mouser or Calrad Electronics			\$.35	
Electrodes, stretch elastic, Velcro, cotton flannel, alligator clips, etc.			<u>± 5.00</u>	(see notes)
Total cost for all components for do-it-yourself project			\$49.24	

This design is basically a 7555 IC timer chip set for 50% duty cycle and ~3.9 Hz driving a subminiature relay. Electrode polarity continually reverses: ~1/4 second positive / 1/4 second negative. Frequency is not critical.

Patents applied for.

Footnote:

CODE OF FEDERAL REGULATIONS 21 § 807.65 Subpart D – Exemptions, Paragraphs (d) & (f)

Excludes and exempts from regulation:

"(d) Licensed practitioners, including physicians, dentists, and optometrists, who manufacture or otherwise alter devices solely for use in their practice."

"(f) Persons who manufacture, prepare, propagate, compound, or process devices solely for use in research, teaching, or analysis, and do not introduce such devices into commercial distribution."

Use of this device therefore appears legal and exempt from FDA regulations when you construct it yourself for research and/or use in your own practice! But double-check your local, county and state regulations for possible exceptions.