

Search Term: plastic cogs for small motor
One site that stocks these located at:
<http://www.gizmoszone.com/shopping/agora.cgi>

All Wire Magnet Wire Unless Otherwise Stated

For Copper Wire purchase from Home Depot or OSH
For Magnet Wire, Radio Shack
For 1 watt bulbs –Auto supply store

Wire:
4/10 mm Bare Copper Wire
16 and 28 Guage Wire
#26 Guage Wire 50 turns
14 Guage Magnet Wire – 72 Turns for Super Joule Ringer
28 Guage Magnet Wire 72 Turns for Super Joule Ringer
30 Guage – 800 turns – Back EMF Device
23 Guage Wire - 500 Turns
26 Guage Wire – 500 Turns
18 AWG Wire – 4 turns
32 AQG Wire for Body Joule Theif
22 Guage wire – 22 turns for Dr. Sch.
24 Guage Wire – 24 turns for Dr. Sch

20 microhenry inductor- \$183 - mouser
<http://www.mouser.com/ProductDetail/KEMET-NEC-TOKIN/SC-01-20GS/?qs=sGAEpiMZZMul3u5M2kZC5HSmeAYIzprS>

0.1 (lower power) microhenry inductor- 78 cents - mouser
<http://www.mouser.com/ProductDetail/KEMET-NEC-TOKIN/SU9H-01100/?qs=sGAEpiMZZMul3u5M2kZC5Eflj42u%252bxmM>

Diodes:

3 volt zener diode

3 volt zener diode – 10 cents – mouser
<http://www.mouser.com/ProductDetail/Vishay-Semiconductors/BZX85C2V7-TAP/?qs=sGAEpiMZZMtQ8nqTKtFS%2fKNhUV17y0qNgIRBbvT27MM%3d>
12 volts – 10 cents – mouser
<http://www.mouser.com/ProductDetail/Vishay-Semiconductors/BZX85B12-TAP/?qs=sGAEpiMZZMtQ8nqTKtFS%2fKNhUV17y0qN>

Transistors:

\$1.90 2N1613 - for rechargeable joule thief – mouser
<http://www.mouser.com/ProductDetail/Central-Semiconductor/2N1613/?qs=sGAEpiMZZMshyDBzk1%2fWiw99kSkYzPxmTsSyUb%2fpy2A%3d>

TIP32A - NPN
63 cents mouser
<http://www.mouser.com/ProductDetail/STMicroelectronics/TIP31A/?qs=sGAEpiMZZMshyDBzk1%2fWi8oN7VHZ91Okoe3E3mSIPYE%3d>

TIP31A - NPN
63 cents mouser
<http://www.mouser.com/ProductDetail/STMicroelectronics/TIP31A/?qs=sGAEpiMZZMshyDBzk1%2fWi8oN7VHZ91Okoe3E3mSIPYE%3d>

33 cents - 2N3904 - for rechargeable joule thief – Mouser:
<http://www.mouser.com/ProductDetail/Central-Semiconductor/2N3904/?qs=sGAEpiMZZMshyDBzk1%2fWiw99kSkYzPxm7NzGOknJzA%3d>

38 cents PNP BC557C - mouser
<http://www.mouser.com/ProductDetail/ON-Semiconductor/BC557CZL1G/?qs=sGAEpiMZZMshyDBzk1%2fWi%2fPUgtcINldI9mG3I8W%252bH%252bw%3d>

\$1.76 - TIP3055 NPN
Mouser
<http://www.mouser.com/ProductDetail/STMicroelectronics/TIP3055/?qs=sGAEpiMZZMshyDBzk1%2fWi8oN7VHZ91OkCeAnKzc6eZA%3d>

40 cents mouser
MPS2222 transistor
<http://www.mouser.com/ProductDetail/ON-Semiconductor/MPS2222AG/?qs=sGAEpiMZZMshyDBzk1%2fWi%2fPUgtcINldIdgQojgknjuA%3d>

99 cents 2N6487G
Mouser:
<http://www.mouser.com/ProductDetail/ON-Semiconductor/2N6487G/?qs=%2fha2pyFaduiN9HQkA6O6kExbqYjgkYy6aK%252b1PPSK41q%3d>

\$2.00 2N3055 Transistor for Super Joule
Mouser:
<http://www.mouser.com/ProductDetail/STMicroelectronics/2N3055/?qs=sGAEpiMZZMshyDBzk1%2fWi8oN7VHZ91Okua4XqaXlzP8%3d>

[8jl%252bQjpwY2U%3d](#)

5 volts – 12 cents – mouser

<http://www.mouser.com/ProductDetail/Fairchild-Semiconductor/1N5231CTR/?qs=sGAEpiMZZMtQ8nqTKtFS%2fJlts9HBLkA2GFnVtphSpBw%3d>

15 volts – 10 cents – mouser

<http://www.mouser.com/ProductDetail/Vishay-Semiconductors/BZX85B15-TAP/?qs=sGAEpiMZZMtQ8nqTKtFS%2fKNhUV17y0qNEAVAJ66t7c8%3d>

3 Diodes: 1N4148 (rated 75v to 0.45a)

10 Cents Mouser:

<http://www.mouser.com/ProductDetail/Fairchild-Semiconductor/1N4148/?qs=sGAEpiMZZMtHjESLttvk0BU6cp6%252bZs9oaGbBohxil%3d>

14 Cents 3 Diodes: 1N4007

Mouser:

<http://www.mouser.com/Search/ProductDetail.aspx?q s=ZbYWOjW8mGpDHeErRax7Q%3d%3d>

15 cents 1N4005 Diode

Mouser:

<http://www.mouser.com/ProductDetail/Fairchild-Semiconductor/1N4005/?qs=sGAEpiMZZMutXGli8Ay4kPAzEpYEegVGDzP2CSUV0BY%3d>

14 cents 1N4007 Diode

Mouser

<http://www.mouser.com/ProductDetail/Fairchild-Semiconductor/1N4007/?qs=sGAEpiMZZMuQUXCJI7Y4lvWy%252b1U8RtCq>

13 cents 1N4001

Mouser

<http://www.mouser.com/ProductDetail/Fairchild-Semiconductor/1N4001/?qs=sGAEpiMZZMutXGli8Ay4kJFypYesfd9y2GUYLufLO%3d>

Resistors:

15K OHM resistor – 8 cents – mouser

<http://www.mouser.com/ProductDetail/KOA-Speer/RK73H1ETTP1502F/?qs=sGAEpiMZZMt8mAjq5idJEaemxCKuDYub>

2.2 k resistor - \$1.00 – mouser

<http://www.mouser.com/ProductDetail/Arcol/ACS-5s-2R2-J-TR/?qs=sGAEpiMZZMussSNCYZZYJFU9%2fOEcfeS1>

47ohm resisitor - 7 cents mouser

<http://www.mouser.com/ProductDetail/KOA-Speer/MF1-4LCT52R470J/?qs=sGAEpiMZZMv8QEQcPUP6BZknR%2fHmUtbS>

\$1.79 each 2N2222 Transistor

Mouser

<http://www.mouser.com/ProductDetail/Central-Semiconductor/2N2222/?qs=sGAEpiMZZMutncetXCRkfr9ya76sGO0s>

33 cents each 2N3906 Transistor

Mouser

<http://www.mouser.com/ProductDetail/Central-Semiconductor/2N3906/?qs=sGAEpiMZZMutXGli8Ay4klJgarBn5mBf82ffXC%252bp2%252bq%3d>

7 cents BC 337

Mouser

<http://www.mouser.com/ProductDetail/Central-Semiconductor/BC337/?qs=sGAEpiMZZMt4mzalGOvS0jNHSa%252b1%252bZed>

21 cents BC 327

Mouser

<http://www.mouser.com/ProductDetail/Fairchild-Semiconductor/BC32725TA/?qs=sGAEpiMZZMvAvBNgSS9LqjpUYdueZiE0>

38 cents Mouser: MPSA06

<http://www.mouser.com/ProductDetail/ON-Semiconductor/MPSA06RLG/?qs=sGAEpiMZZMtqO%252bWUGLBel12b8DXEqnB>

23 cents C1815 mouser

<http://www.mouser.com/ProductDetail/Fairchild-Semiconductor/KSC1815YTA/?qs=sGAEpiMZZMvAvBNgSS9LqoMeEgbnw2W0>

25 cents Heatsink:

<http://www.mouser.com/ProductDetail/Wakefield/274-2AB/?qs=sGAEpiMZZMuFYi0ZsYM5P0mKUwkBniHK>

Purchase from Auto Supply Store

a 1 WATT small bulb

a 5 larger bulb

Neon Bulb – Dr. S

3 Watt Bulb – for Dr. S

50 cents solid Rod

6.35x25.40MM

Mouser – **ORDER 5 OF THESE 41MM LONG**

<http://www.mouser.com/ProductDetail/Fair-Rite/4077375411/?qs=sGAEpiMZZMs2JV%252bnT%2fvX8PSq2BULPkJL7yvMSZbulms%3d>

\$1.50 1.625" x .372 solid rod

Mouser

<http://www.mouser.com/ProductDetail/Fair-Rite/4077375411/?qs=sGAEpiMZZMukHu%252bjC5I7YR29uXlysirpUXTcP4Aofus%3d>

10 cents 12 OHM SW Resistor – For Dr. S
Mouser:
<http://www.mouser.com/ProductDetail/Vishay-BC-Components/PR02000201209JR500/?qs=sGAEpiMZZMs26uXuX7MLMeUGJPSZnwHh>

8 cents 47 OHM Resistor
Mouser:
<http://www.mouser.com/ProductDetail/KOA-Speer/MF1-4LCT52R470J/?qs=sGAEpiMZZMv8QEQcPUP6BZknR%2fHmUtbS>

\$1.00 100 OHM Resistor – to boost resistance make resistors in series
Mouser
<http://www.mouser.com/ProductDetail/Vishay-Dale/CPF3100K00FKE14/?qs=sGAEpiMZZMvmMeM28A2o4FWq5tiY9uWQ>

90 cents 1K Resistor
mouser
<http://www.mouser.com/ProductDetail/KOA-Speer/PCF1CT631R102K/?qs=sGAEpiMZZMtlubZbdhI BIFP Jws4ZhNGiIYm2y%2fM4Gc%3d>

\$3.00 10K Resistor (photometer)
Mouser
<http://www.mouser.com/ProductDetail/ALPS/RK09711T065/?qs=sGAEpiMZZMvYU0Oh5y3R5rKYAL5secsKp>

40 cents Relay Switch
Mouser:
<http://www.mouser.com/ProductDetail/Diodes-Incorporated/DRDNB16W-7/?qs=sGAEpiMZZMsn4laorHFpMP9P3tuXHTFT>

\$1.00 Reed Switch
Mouser
<http://www.mouser.com/ProductDetail/Hamlin/MDSM-4R-12-18/?qs=sGAEpiMZZMukBJem%252bjLAJwm0zXYqWd Ji>

\$1.14 555 Chip Mouser
<http://www.mouser.com/ProductDetail/Micrel/MIC1555YM5-TR/?qs=sGAEpiMZZMvOGd0yIpsAhAsdIpXnW3sv>

\$7.00 cents torroid ring:
<http://www.mouser.com/ProductDetail/Vacuumschmelze/T60006-L2025-W523/?qs=sGAEpiMZZMs2JV%252bnT%2fvX8PvC43ppqs%252bkdLi7pVwuD3o%3d>

Capacitors:

.001 uf capacitor – 6 cents – mouser
<http://www.mouser.com/ProductDetail/Lelon/REA010M2CBK-0511P/?qs=sGAEpiMZZMvANcmvDb1WMWH5cxxEdYAF>

47pf
<http://www.mouser.com/ProductDetail/TKD/CK45-R3AD471KANRA/?qs=sGAEpiMZZMviKXukECHWvWnwUrf Wxmtx>

50 cents Two 50UF Caps
<http://www.mouser.com/ProductDetail/AVX/NOJA476M002R WJ/?qs=sGAEpiMZZMsh%252b1woXyUXj0KB%252bOCGv WtFpbREBeBDIII%3d>

Super – Boost Capacitors

\$11 each Car Battery Supercap:
Mouser
<http://www.mouser.com/ProductDetail/Maxwell-Technologies/BCAP0350-E270-T11/?qs=sGAEpiMZZMuDCPMZUZ%252bYI72JRL%2f4IUvC U6Qev3HC%252bwo%3d>

9V Battery – (99cent store)

\$1.07 10K Potimeter
Mouser:
<http://www.mouser.com/ProductDetail/ALPS/RK09L114001T /?qs=sGAEpiMZZMtC25I1F4XBUyOcKw5CnqLBr%2fUuGzy QCQw%3d>

\$21.00 Peltier for Body Joule Theif
Mouser:
<http://www.mouser.com/ProductDetail/Laird-Technologies-Thermal-Solutions/430801-504/?qs=sGAEpiMZZMtmn8YSqN0aUZmDO1i%252buLb6>

45 cents 3.3 ohm resistor
Mouser
<http://www.mouser.com/ProductDetail/EPCOS/B78108S1224 J/?qs=sGAEpiMZZMsprRPEdcYqlsX1vijWr2Ik>