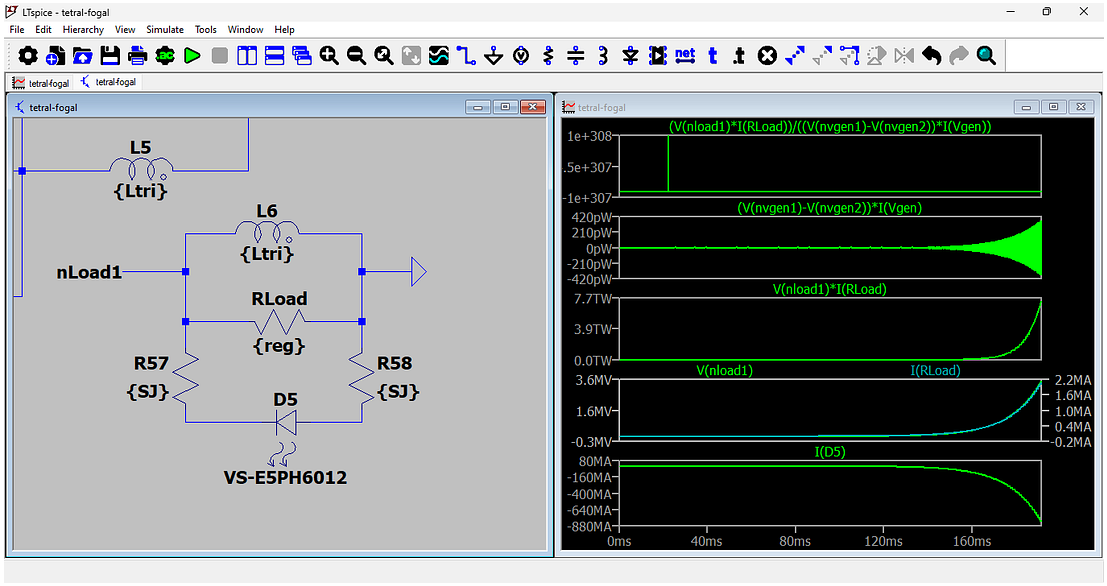
No Negative Magnetic Coupling is Required when Four Panels of William Jay Fogal's Charged Barrier Transistor are Built into a Tetrahedron, update.

VINYASI

MAY 28, 2026

I added an LED in parallel across the resistive load:



Here’s the netlist:

* D:\Documents\Sims\LTSpice\2026\05 - May\27\tetral-fogal.asc

* Generated by LTspice 24.1.9 for Windows.

Vgen nVgen1 nVgen2 SINE(0 {input} {freq}) Rser={res}

Rbah nPar2 nVgen1 {bah}

RVgen2 0 nVgen2 {SJ}

R2 nPar2 nPar3 {SJ}

Q1 N008 nPar3 N007 0 2SCR542F3

R4 0 N012 {SJ}

L2 N010 N004 {Ltri} Rser={Ltri}

L1 N012 N003 {Ltri} Rser={Ltri}

L3 N015 N016 {Ltri} Rser={Ltri}

R7 nPar2 N010 {SJ}

R8 nPar2 N016 {SJ}

R9 N015 0 {SJ}

R5 N003 nPar3 {SJ}

R6 nPar3 N004 {SJ}

R10 0 N007 {SJ}

R11 nPar2 N008 {SJ}

R1 0 nPar3 {SJ}

R3 0 nPar2 {SJ}

D1 N028 N017 VS-E5PH6012

R12 0 N028 {SJ}

R13 nPar2 N029 {SJ}

R14 N043 0 {SJ}

R15 N044 nPar2 {SJ}

R16 N018 N017 1

R17 N046 N045 {SJ}

R18 N019 N018 1

R19 0 N019 {SJ}

R20 N042 N046 1

R21 0 N042 1

C1 N019 N042 10n Rser=1m

Q2 N023 N021 N019 0 2SCR542F3

Q3 N020 N022 N019 0 2SCR542F3

R22 N021 N020 {SJ}

R23 N023 N022 {SJ}

L4 N020 N042 {Ltri} Rser={Ltri}

L5 N042 N023 {Ltri} Rser={Ltri}

L6 nLoad1 0 {Ltri} Rser={Ltri}

RLoad nLoad1 0 {reg}

D2 N029 N018 VS-E5PH6012

D3 N046 N044 VS-E5PH6012

D4 N045 N043 VS-E5PH6012

R24 nPar3 nPar4 {SJ}

Q4 N006 nPar4 N005 0 2SCR542F3

R25 0 N011 {SJ}

L7 N009 N002 {Ltri} Rser={Ltri}

L8 N011 N001 {Ltri} Rser={Ltri}

L9 N013 N014 {Ltri} Rser={Ltri}

R26 nPar3 N009 {SJ}

R27 nPar3 N014 {SJ}

R28 N013 0 {SJ}

R29 N001 nPar4 {SJ}

R30 nPar4 N002 {SJ}

R31 0 N005 {SJ}

R32 nPar3 N006 {SJ}

R33 0 nPar4 {SJ}

R34 0 nPar3 {SJ}

R35 nPar2 nPar4 {SJ}

Q5 N033 nPar4 N032 0 2SCR542F3

R36 nPar3 N037 {SJ}

L10 N035 N027 {Ltri} Rser={Ltri}

L11 N037 N026 {Ltri} Rser={Ltri}

L12 N040 N041 {Ltri} Rser={Ltri}

R37 nPar2 N035 {SJ}

R38 nPar2 N041 {SJ}

R39 N040 nPar3 {SJ}

R40 N026 nPar4 {SJ}

R41 nPar4 N027 {SJ}

R42 nPar3 N032 {SJ}

R43 nPar2 N033 {SJ}

R44 nPar3 nPar4 {SJ}

R45 nPar3 nPar2 {SJ}

R46 0 nPar4 {SJ}

Q6 N031 nPar4 N030 0 2SCR542F3

R47 nPar2 N036 {SJ}

L13 N034 N025 {Ltri} Rser={Ltri}

L14 N036 N024 {Ltri} Rser={Ltri}

L15 N038 N039 {Ltri} Rser={Ltri}

R48 0 N034 {SJ}

R49 0 N039 {SJ}

R50 N038 nPar2 {SJ}

R51 N024 nPar4 {SJ}

R52 nPar4 N025 {SJ}

R53 nPar2 N030 {SJ}

R54 0 N031 {SJ}

R55 nPar2 nPar4 {SJ}

R56 nPar2 0 {SJ}

D5 N048 N047 VS-E5PH6012

R57 N047 nLoad1 {SJ}

R58 N048 0 {SJ}

.model D D

.lib C:\Users\vinya\AppData\Local\LTspice\lib\cmp\standard.dio

.model NPN NPN

.model PNP PNP

.lib C:\Users\vinya\AppData\Local\LTspice\lib\cmp\standard.bjt

.param input = 1m

.param Ltri = 10m

```
.param freq = 5e5

.param res = 10m

.param reg = 1.675 ; 6.9

.param bah = 3e9

.param sj = 100u

.param tA = 17.82m

.param tB = 1

*

.param cusp = 0.9

*

K46 L4 L6 {cusp}

K56 L5 L6 {cusp}

*

.options reltol = 1e-4

.options plotwinsize = 0

*

.save V(nVgen1) V(nVgen2) I(Vgen) V(nLoad1) I(RLoad) I(D5)

*

.tran {tB}
```

.backanno

.end

Download this update.