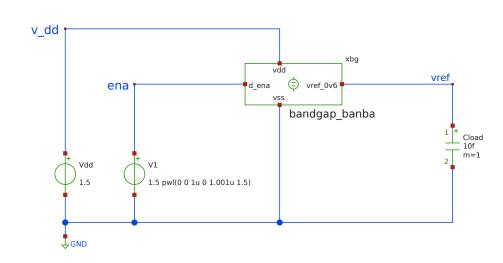
```
NGSPICE
 .control
 option klu
 option method=gear
 option noacct
 option noinit
 save v(vref)
 save all
 compose temp vec start=-30 stop=125 step=5
 let vref vec=vector(length(temp vec))
 let idx=\overline{0}
 foreach tmp $&temp vec
   option temp=$tmp
   tran 0.01u 50u
   meas tran vr FIND v(vref) AT=50u
   let vref vec[idx]=vr
   let idx = \overline{i}dx + 1
 end
 plot vref_vec vs temp_vec
 wrdata bandgap banba.txt vref vec vs temp vec
```



## MODEL

.endc

.lib cornerMOSlv.lib mos\_tt
.lib cornerHBT.lib hbt\_typ
.lib cornerRES.lib res typ



