

```
.MODEL QBF422 NPN(
+ IS=7.974E-15
+ NF=0.993
+ ISE=2.266E-16
+ NE=1.18
+ BF=122
+ IKF=0.01029
+ VAF=25.51
+ NR=0.999
+ ISC=4.33E-12
+ NC=1.397
+ BR=6.235
+ IKR=0.02746
+ VAR=19.43
+ RB=1
+ IRB=1E-06
+ RBM=0.5
+ RE=0.3814
+ RC=0.439
+ XTB=0
+ EG=1.11
+ XTI=3
+ CJE=1.742E-11
+ VJE=0.4581
+ MJE=0.3092
+ TF=7.073E-10
+ XTF=289.5
+ VTF=6.144
+ ITF=0.1495
+ PTF=0
+ CJC=5.045E-12
+ VJC=0.197
+ MJC=0.1947
+ XCJC=0.1041
+ TR=1E-08
+ CJS=0
+ VJS=0.75
+ MJS=0.333
+ FC = 0.8555)
*
```