

```
.MODEL QBF824 PNP(
+ IS=2.948E-16
+ NF=0.99
+ ISE=1.879E-14
+ NE=2.469
+ BF=42
+ IKF=0.05266
+ VAF=35
+ NR=0.9809
+ ISC=2.21E-15
+ NC=1.25
+ BR=1.5
+ IKR=0.05
+ VAR=33.62
+ RB=1
+ IRB=1E-06
+ RBM=0.5
+ RE=0.1038
+ RC=4.2
+ XTB=0
+ EG=1.11
+ XTI=3
+ CJE=2.453E-12
+ VJE=0.7113
+ MJE=0.3218
+ TF=2.602E-10
+ XTF=9.349
+ VTF=2.773
+ ITF=0.1748
+ PTF=0
+ CJC=3.237E-12
+ VJC=0.4038
+ MJC=0.3117
+ XCJC=0.0464
+ TR=1E-32
+ CJS=0
+ VJS=0.75
+ MJS=0.333
+ FC=0.8618)
*
```