

.MODEL QBC848CW NPN(

+ IS = 2.375E-14
+ NF = 0.9925
+ ISE = 5.16E-16
+ NE = 1.3
+ BF = 524.9
+ IKF = 0.09
+ VAF = 49.77
+ NR = 0.9931
+ ISC = 7.064E-12
+ NC = 1.78
+ BR = 10.04
+ IKR = 0.132
+ VAR = 16
+ RB = 10
+ IRB = 5E-06
+ RBM = 5
+ RE = 0.653
+ RC = 0.78
+ CJE = 1.132E-11
+ VJE = 0.7685
+ MJE = 0.3733
+ TF = 4.258E-10
+ XTF = 6.319
+ VTF = 6.4
+ ITF = 0.1845
+ PTF = 0
+ CJC = 3.379E-12
+ VJC = 0.5444
+ MJC = 0.3968
+ XCJC = 0.6193
+ TR = 9.5E-08
+ CJS = 0
+ VJS = 0.75
+ MJS = 0.333
+ XTB = 0
+ XTI = 3
+ EG = 1.11
+ FC = 0.999)

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