



.MODEL 2sk170 Nf (VTO=-5.211e-001 BETA=3.683e-002 LAMBDA=4.829e-003
+ IS=1.000e-009 RD=0.000e+000 RS=0.000e+000
+ CGS=5.647e-011 CGD=2.562e-011 PB=4.860e+000 FC=0.5)

.MODEL bc546 NPN (IS=2.39E-14 NF=1.008 ISE=3.55E-15 NE=1.541 BF=294.3 IKF=0.1357 VAF=63.2 NR=1.004 ISC=6.27E-14 NC=1.243 BR=7.946 IKR=0.1144 VAR=25.9 RB=1 IRB=1.00E-06
+ RBM=1 RE=0.4683 RC=0.85 XTB=0 EG=1.11 XT=3 CJE=1.36E-11 VJE=0.65 MJE=0.3279 TF=4.39E-10 XTF=120 VTF=2.643 ITF=0.7495 PTF=0 CJC=3.73E-12 VJC=0.3997 MJC=0.2955
+ XCJC=0.6193 TR=1.00E-32 CJS=0.75 VJS=0.75 MJS=0.333 FC=0.9579 Vceo=65 Icrating=100m mfg=Philips)

.model bc556 PNP (IS=3.83E-14 NF=1.008 ISE=1.22E-14 NE=1.528 BF=344.4 IKF=0.08039 VAF=21.11 NR=1.005 ISC=2.85E-13 NC=1.28 BR=14.84 IKR=0.047 VAR=32.02 RB=1 IRB=1.00E-06
+ RBM=1 RE=0.6202 RC=0.5713 XTB=0 EG=1.11 XT=3 CJE=1.23E-11 VJE=0.6106 MJE=0.378 TF=5.60E-10 XTF=3.414 VTF=5.23 ITF=0.1483 PTF=0 CJC=1.08E-11 VJC=0.1022 MJC=0.3563
+ XCJC=0.6288 TR=1.00E-32 CJS=0.75 MJS=0.333 FC=0.8027 Vceo=65 Icrating=100m mfg=Philips)

.MODEL 2sk1058 NMOS (VTO=403.969M KP=20U L=2U W=29.7482M GAMMA=0 PHI=600M
+ LAMBDA=184.988F RD=60.8251M CBD=2.56138N IS=10F CGSO=1.13517N CGDO=1.13517N
+ TOX=0 NSUB=0 TPG=1 UO=600 RG=50 RDS=1MEG)

.MODEL 2sj1058 PMOS (VTO=403.969M KP=20U L=2U W=29.7482M GAMMA=0 PHI=600M
+ LAMBDA=184.988F RD=60.8251M CBD=2.56138N IS=10F CGSO=1.13517N CGDO=1.13517N
+ TOX=0 NSUB=0 TPG=1 UO=600 RG=50 RDS=1MEG)

.MODEL 2sk162 NMOS (VTO=842.193M KP=20U L=2U W=21.3317M GAMMA=0 PHI=600M
+ LAMBDA=20.7067M RD=837.199M CBD=2.96862N IS=10F CGSO=1.13517N CGDO=1.13517N
+ TOX=0 NSUB=0 TPG=1 UO=600 RG=50 RDS=1MEG)

.MODEL 2sj162 PMOS (VTO=842.193M KP=20U L=2U W=21.3317M GAMMA=0 PHI=600M
+ LAMBDA=20.7067M RD=837.199M CBD=2.96862N IS=10F CGSO=1.13517N CGDO=1.13517N
+ TOX=0 NSUB=0 TPG=1 UO=600 RG=50 RDS=1MEG)