

\*\*\*\* 12/11/24 11:31:39 \*\*\*\* PSpice Lite (April 2011) \*\*\*\* ID# 10813 \*\*\*\*

\*\* Profile: "SCHEMATIC1-ACExpSim2" [ F:\Schoolwork\AnalogCircuit\AnalogCircuitExp2\AnalogCircuitExp2-PSpiceFiles\SCHEMATIC1\ACExpSi

\*\*\* CIRCUIT DESCRIPTION

\*\*\*\*\*

\*\* Creating circuit file "ACExpSim2.cir"  
\*\* WARNING: THIS AUTOMATICALLY GENERATED FILE MAY BE OVERWRITTEN BY SUBSEQUENT SIMULATIONS

\*Libraries:  
\* Profile Libraries :  
\* Local Libraries :  
.LIB ".././././analogcircuitexp2-pspicefiles/analogcircuitexp2.lib"  
\* From [PSPICE NETLIST] section of D:\OrCAD\OrCAD\_16.5\_Lite\tools\pspice\PSpice.ini file:  
.lib "nomd.lib"

\*Analysis directives:  
.OP  
.PROBE V(alias(\*)) I(alias(\*)) W(alias(\*)) D(alias(\*)) NOISE(alias(\*))  
.INC "../SCHEMATIC1.net"

\*\*\*\* INCLUDING SCHEMATIC1.net \*\*\*\*  
\* source ANALOGCIRCUITEXP2  
V\_Vs VS 0  
+SIN 0 5mV 1kHz 0 0 0  
R\_Rs VS VI 1k TC=0,0  
C\_C1 VI N00381 10uF TC=0,0  
R\_Rb2 0 N00381 30k TC=0,0  
R\_Rb1 N00381 N00522 57k TC=0,0  
Q\_T N00410 N00381 N00414 Q2N3904  
R\_Rc N00410 N00522 2k TC=0,0  
R\_Re 0 N00414 1k TC=0,0  
C\_Ce 0 N00414 47uF TC=0,0  
C\_C2 N00410 V0 10uF TC=0,0  
V\_Vcc N00522 0 12V  
R\_RL 0 V0 2k TC=0,0

\*\*\*\* RESUMING ACExpSim2.cir \*\*\*\*  
.END

INFO(ORPSIM-15423): Unable to find index file analogcircuitexp2.ind for library file analogcircuitexp2.lib.

INFO(ORPSIM-15422): Making new index file analogcircuitexp2.ind for library file analogcircuitexp2.lib.

Index has 1 entries from 1 file(s).

□  
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\*\*\*\* BJT MODEL PARAMETERS

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Q2N3904  
NPN  
LEVEL 1  
IS 6.734000E-15  
BF 70  
NF 1  
VAF 74.03  
IKF .06678  
ISE 6.734000E-15  
NE 1.259  
BR .7371  
NR 1  
ISS 0  
RB 10  
RE 0  
RC 1  
CJE 4.493000E-12  
VJE .75  
MJE .2593  
CJC 3.638000E-12  
VJC .75  
MJC .3085  
XCJC 1  
CJS 0  
VJS .75  
TF 301.200000E-12  
XTF 2  
VTF 4  
ITF .4  
TR 239.500000E-09  
XTB 1.5  
KF 0  
AF 1  
CN 2.42  
D .87

□  
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\*\*\*\* SMALL SIGNAL BIAS SOLUTION TEMPERATURE = 27.000 DEG C

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NODE VOLTAGE NODE VOLTAGE NODE VOLTAGE NODE VOLTAGE

( VI) 0.0000 ( VO) 0.0000 ( VS) 0.0000 (N00381) 3.2412

(N00410) 6.9872 (N00414) 2.5520 (N00522) 12.0000

VOLTAGE SOURCE CURRENTS  
NAME CURRENT

V\_Vs 0.000E+00  
V\_Vcc -2.660E-03

TOTAL POWER DISSIPATION 3.19E-02 WATTS

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\*\*\*\* OPERATING POINT INFORMATION TEMPERATURE = 27.000 DEG C

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\*\*\*\* BIPOLAR JUNCTION TRANSISTORS

NAME Q\_T  
MODEL Q2N3904  
IB 4.56E-05  
IC 2.51E-03  
VBE 6.89E-01  
VBC -3.75E+00  
VCE 4.44E+00  
BETADC 5.49E+01  
GM 9.36E-02  
RPI 5.95E+02  
RX 1.00E+01  
RO 3.10E+04  
CBE 3.48E-11  
CBC 2.09E-12  
CJS 0.00E+00  
BETAAC 5.57E+01  
CBX/CBX2 0.00E+00  
FT/FT2 4.04E+08

JOB CONCLUDED

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\*\*\*\* JOB STATISTICS SUMMARY

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□ Total job time (using Solver 1) = .11