



Spoken Tutorial, IIT Bombay <u>https://spoken-tutorial.org/</u> eSim Uploading a Spice Device Model in eSim - Assignment

1. Create a .lib file of BC807, PNP transistor and verify the characteristics of PNP transistor using the BJT_Biascircuit example from 'Examples' folder in eSim.

Find the model file below.

.MODEL BC807 PNP (IS=50.7f NF=1.00 BF=821 VAF=121 IKF=0.273 ISE=10.1p NE=2.00 BR=4.00 NR=1.00 VAR=20.0 IKR=0.675 RE=0.213 RB=0.852 RC=85.2m XTB=1.5 CJE=107p VJE=1.10 MJE=0.500 CJC=34.7p VJC=0.300 MJC=0.300 TF=631p TR=108n EG=1.12)

Hint: Create a text file and rename it with .lib extension.The model will be uploaded in UserLibraries folder of eSim.