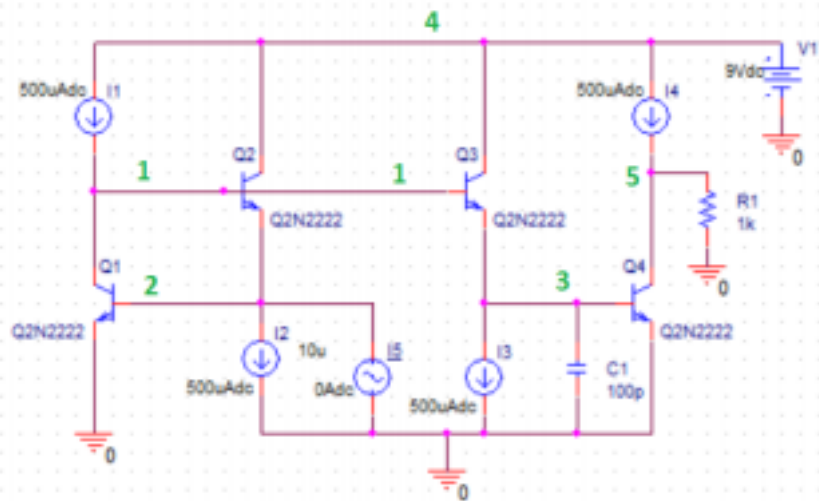


Translinear log domain filter



Script:

```
.lib "eval.lib"
Q_Q1 1 2 0 Q2N2222
Q_Q2 4 1 2 Q2N2222
Q_Q3 4 1 3 Q2N2222
Q_Q4 5 3 0 Q2N2222

I_I1 4 1 DC 500uAdc
I_I2 2 0 DC 500uAdc
I_I3 3 0 DC 500uAdc
I_I4 4 5 DC 500uAdc

C_C1 3 0 100p
R_R1 5 0 1k
V_V1 4 0 9Vdc
*I_in 2 0 DC 0Adc AC 100u
I_in 2 0 sin 0 600u 100k

*.ac dec 1000 1 5e7
.tran 0 10u 0.01n
```

.four 100k I(I_in)

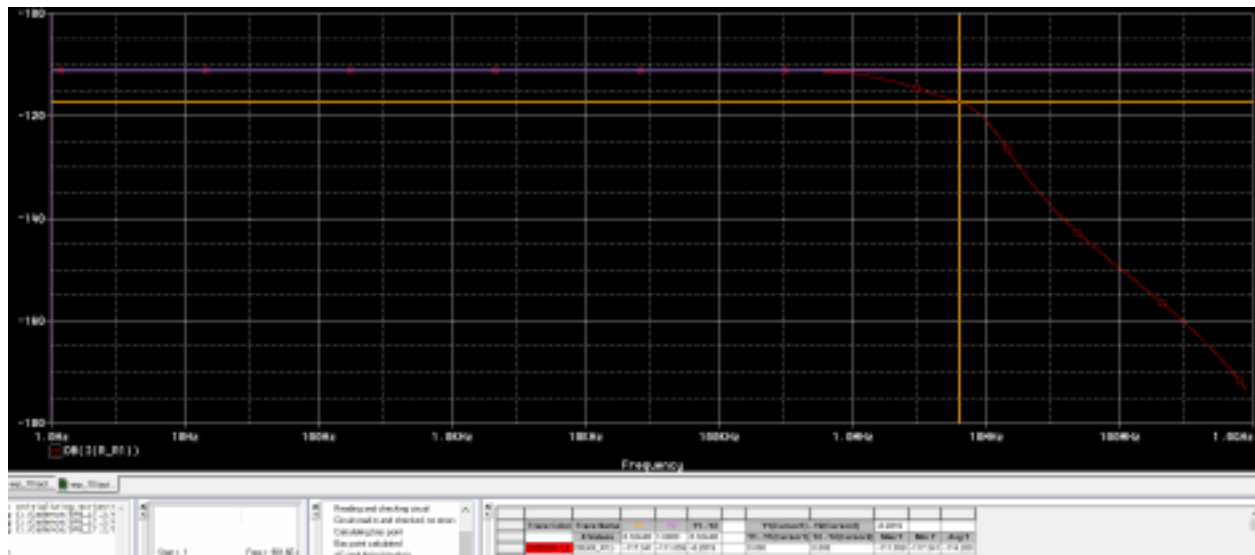
.probe

.end

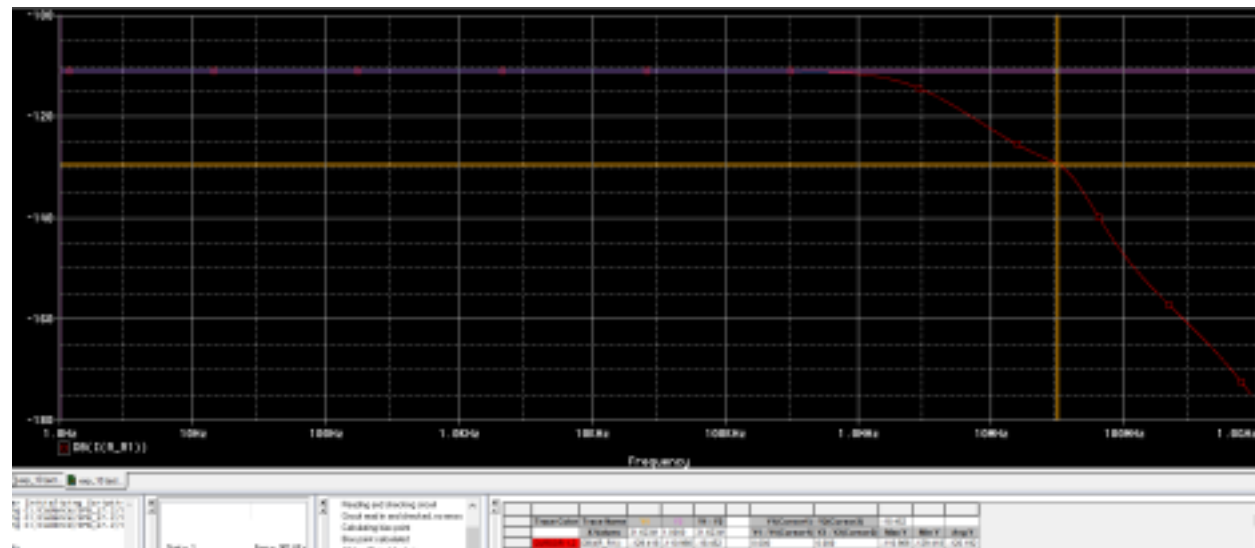
Outputs:

a) Frequency response:

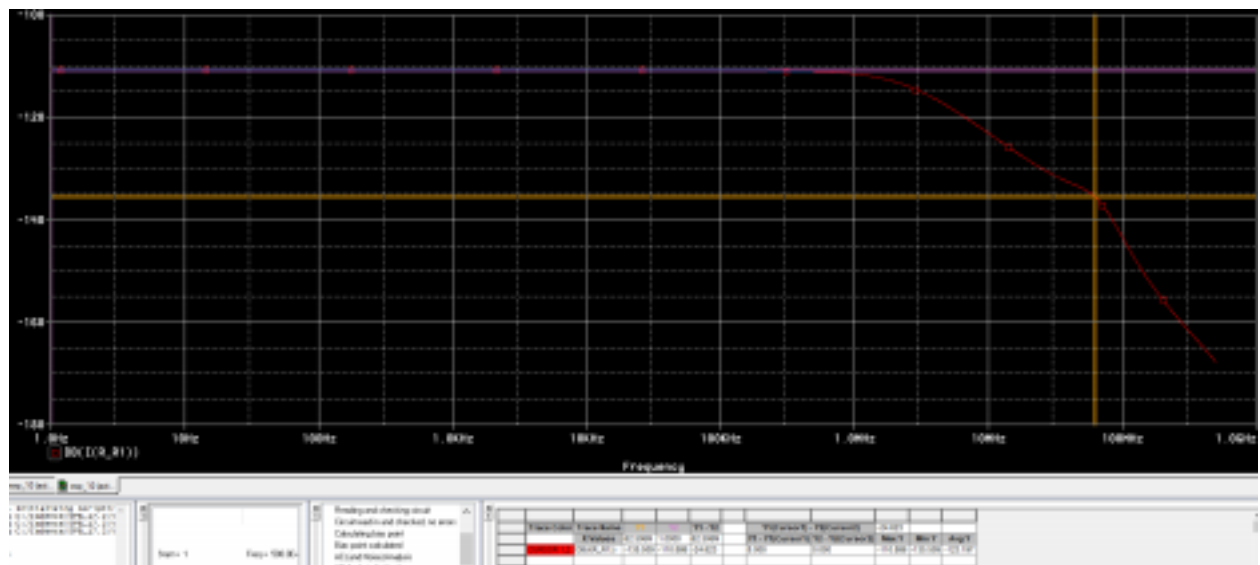
Ib=100u



Ib=500u



Ib=1m



b) Transient analysis:

$I_{in} = 10u$

