

PSpice Model

Operational Amplifier

ADI

AD8042

Model Information

Model An original macro model
Call Name MDC_AD8042_PS
Pin Assign 1:Out 2:In- 3:In+ 4:V- 5:V+
File List Model Library MDC_AD8042_PS01.lib
 Model Report MDC_AD8042_PS.pdf (this file)

Verified Simulator Version PSpice version 16.6
Note

References

The information which was used for modeling is as follow:

[Data Sheet]

- Date/Version Rev. E
- Product name AD8042
- Company name Analog Devices Inc.
- Characteristics GainFreq.[Temp],PhaseFreq.[Temp],Slew rate,Voltage output swing,Input offset voltage,Input bias current,Input referred voltage noise

Simulation Condition

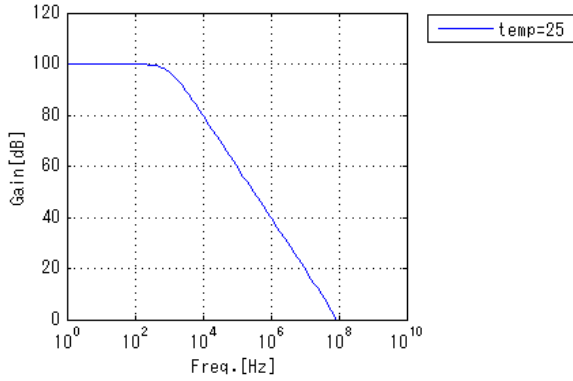
This table shows the value of evaluated simulation condition that was not occurs any convergence problems in this area.

Item	Condition	Unit
Temperature	25	deg C

Simulation results are following.
 Explanatory notes — : simulated

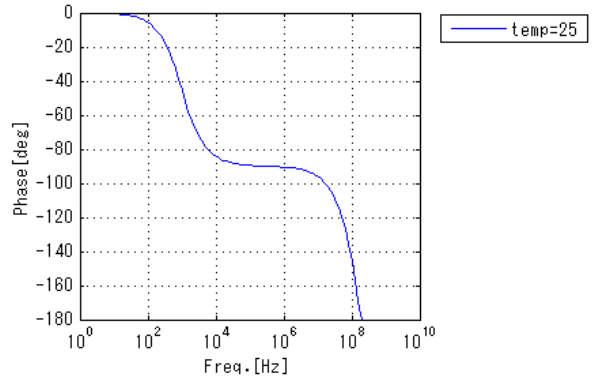
GainFreq.[Temp]

Vs+ = 5V, Vs- = -5V



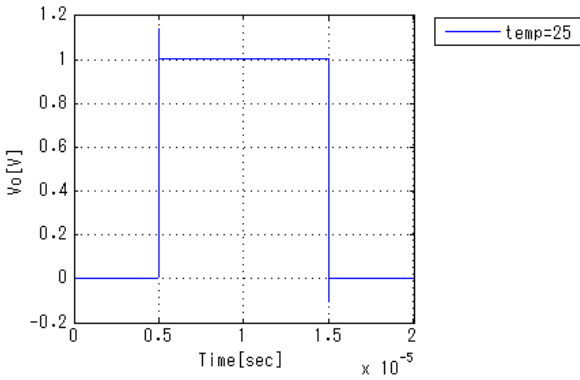
PhaseFreq.[Temp]

Vs+ = 5V, Vs- = -5V



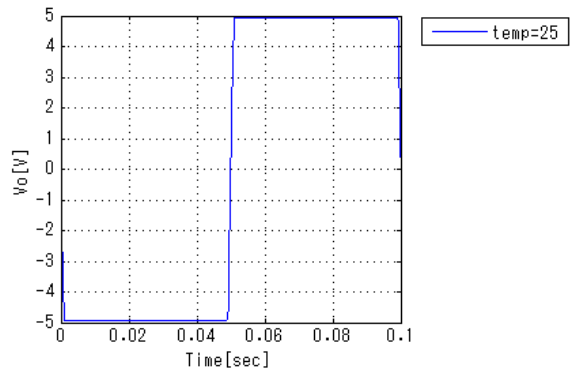
Slew rate

Vs+ = 5V, Vs- = -5V, Gain = 1



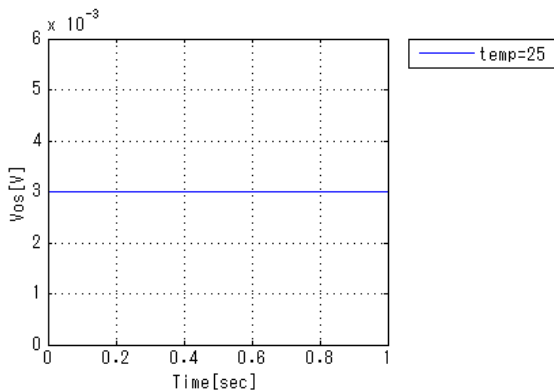
Voltage output swing

Vs+ = 5V, Vs- = -5V, RI = 2000ohm



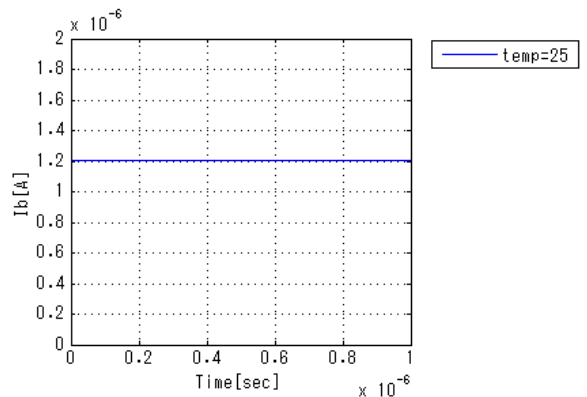
Input offset voltage

Vs+ = 5V, Vs- = -5V



Input bias current

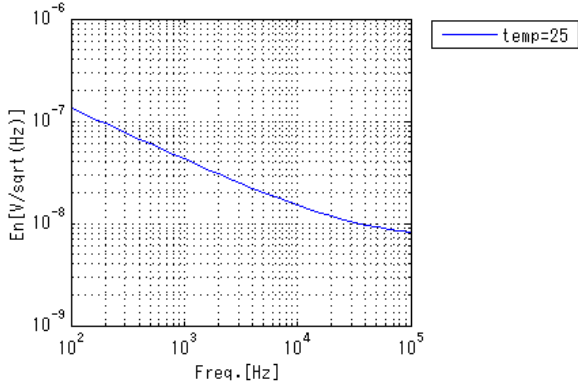
Vs+ = 5V, Vs- = -5V



Simulation results are following.
Explanatory notes — : simulated

Input referred voltage noise

Vs+ = 5V, Vs- = -5V



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