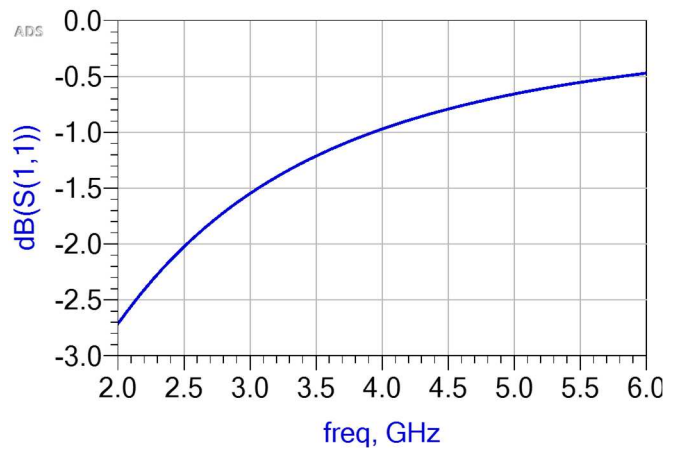
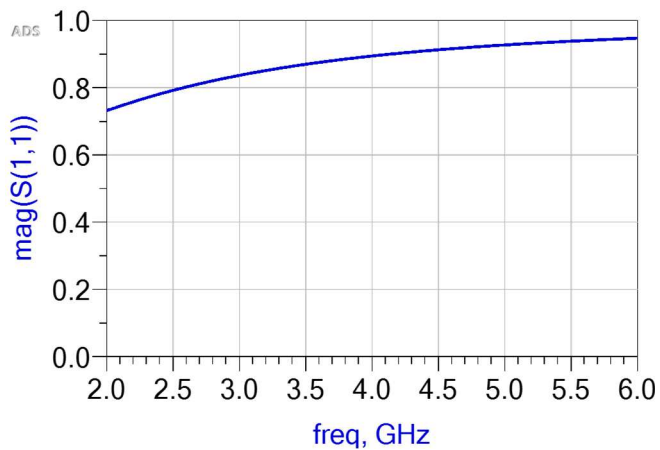
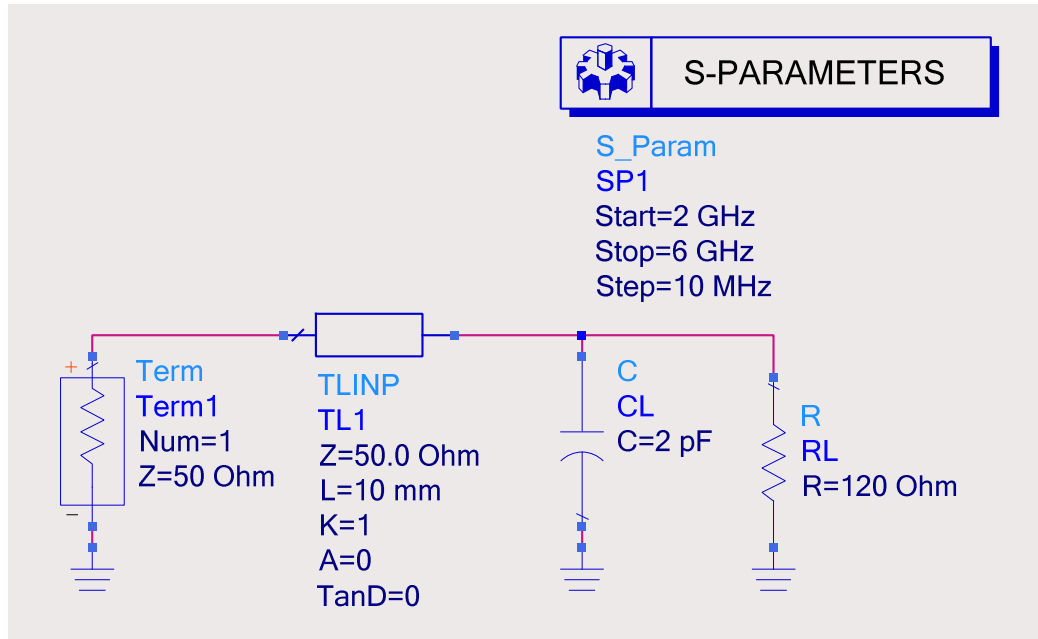


SINGLE-STUB SHUNT MATCHING – ADS EXAMPLE

Dr. J. E. Rayas-Sánchez

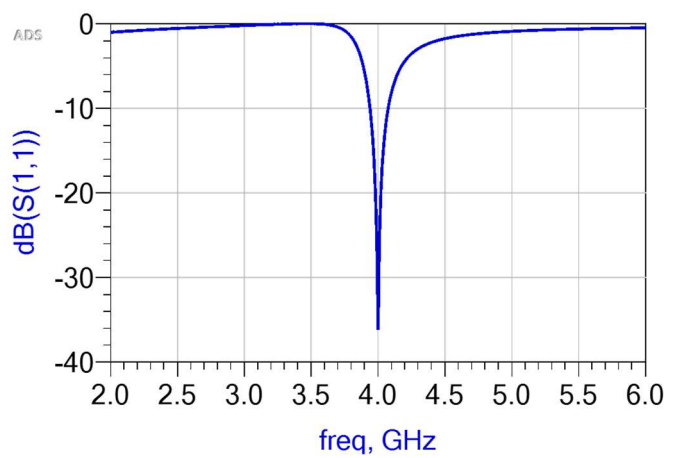
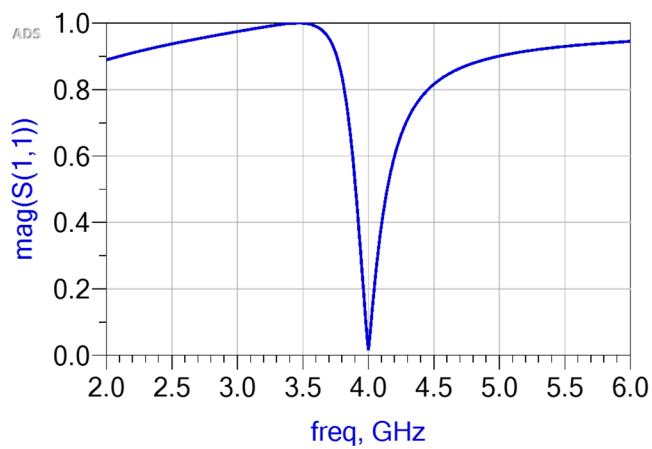
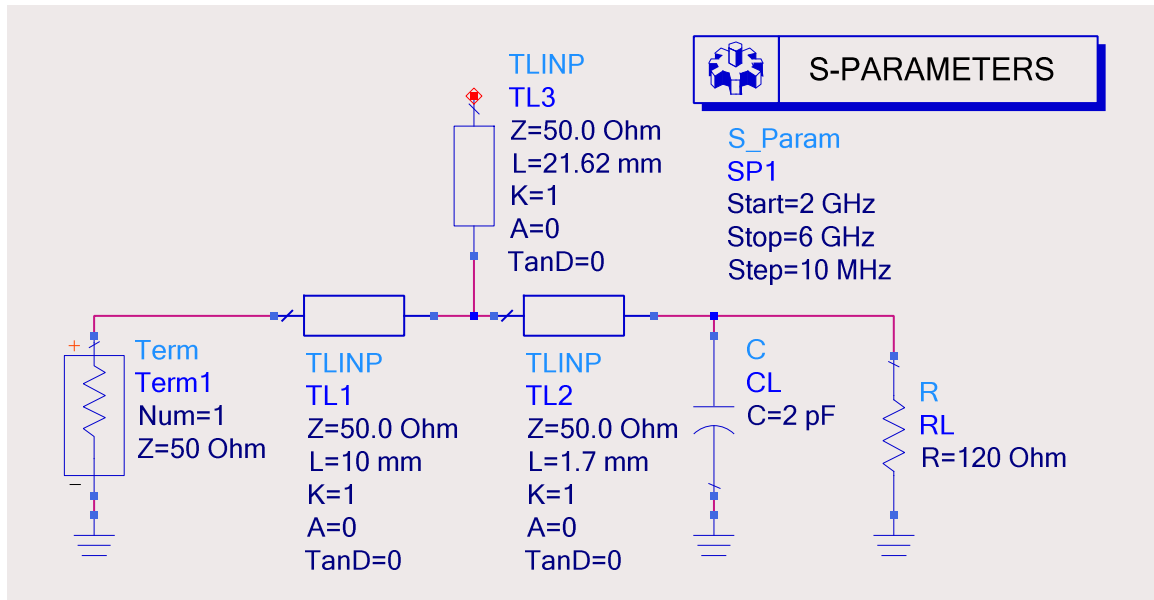
SIMULATION IN ADS OF A SINGLE-STUB SHUNT MATCHING (EXAMPLE)

Original Problem with No Matching Network



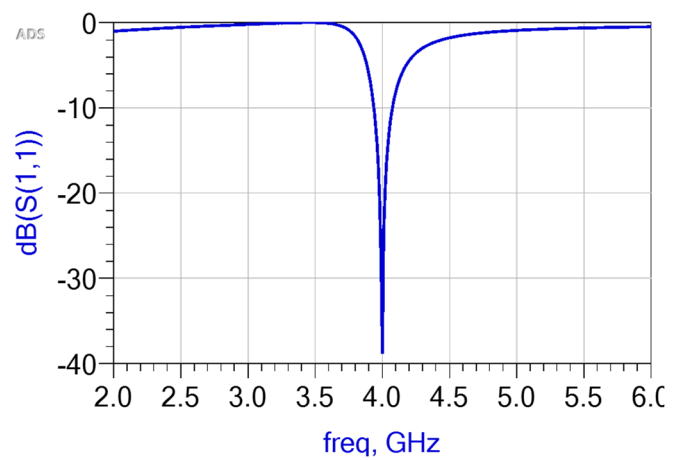
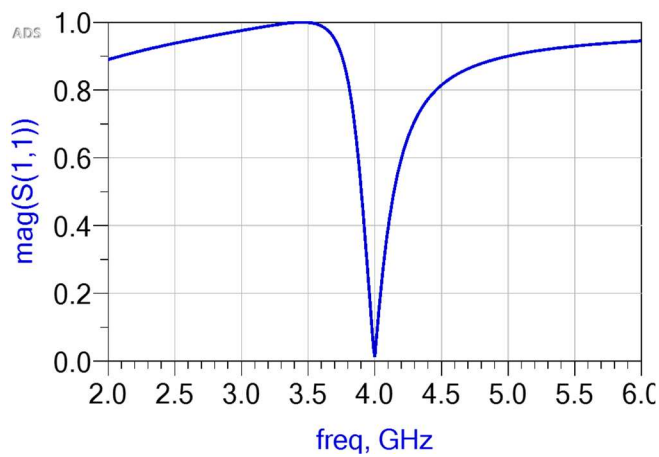
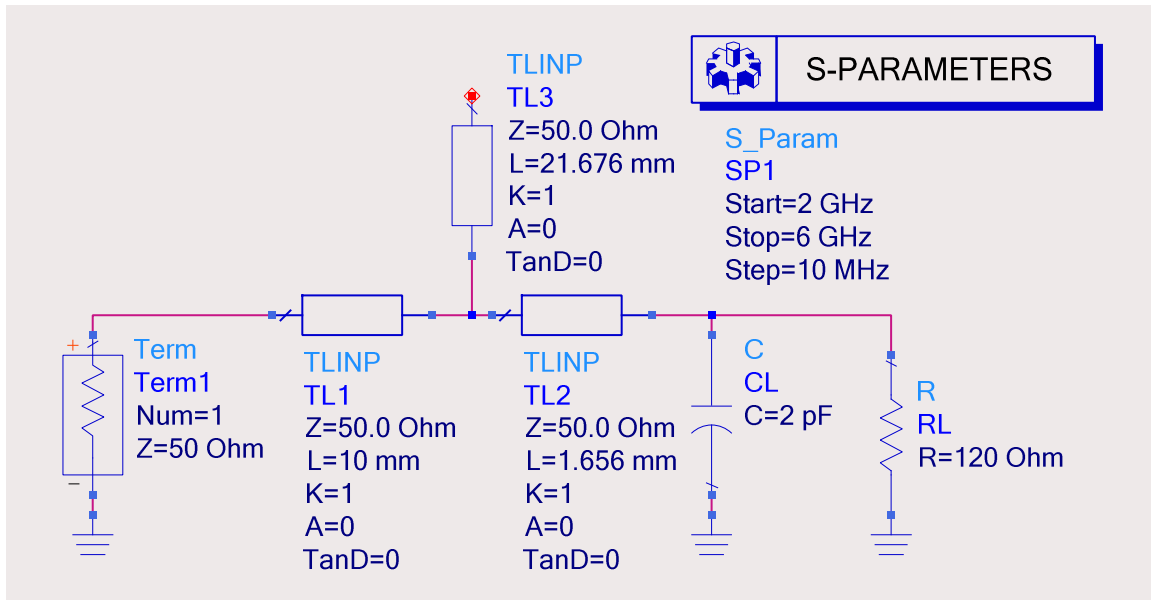
It is seen very high reflections in the whole frequency band, as expected.

Solution 1 (from Smith Chart)



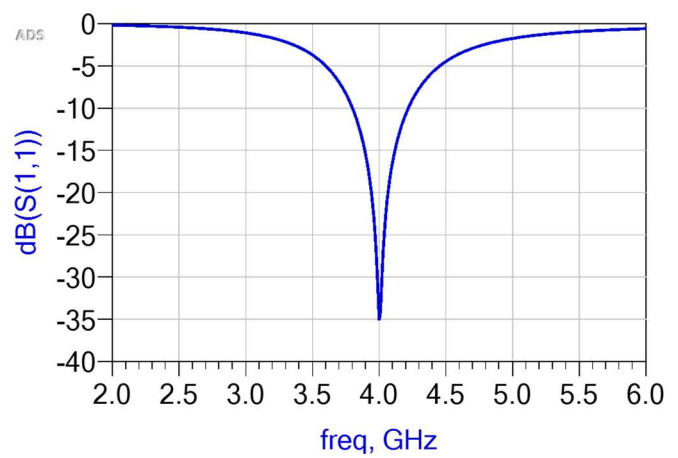
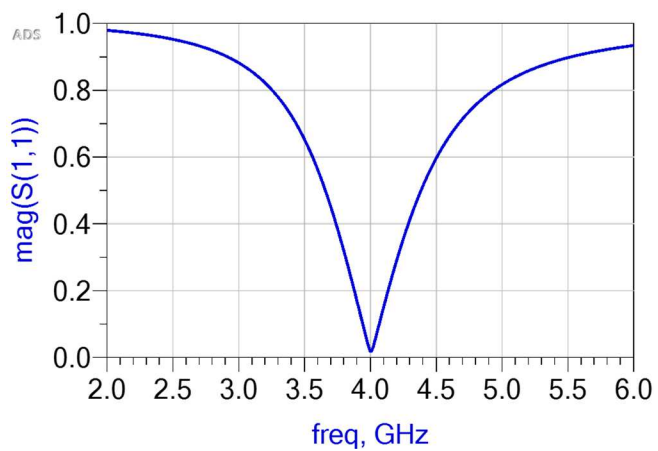
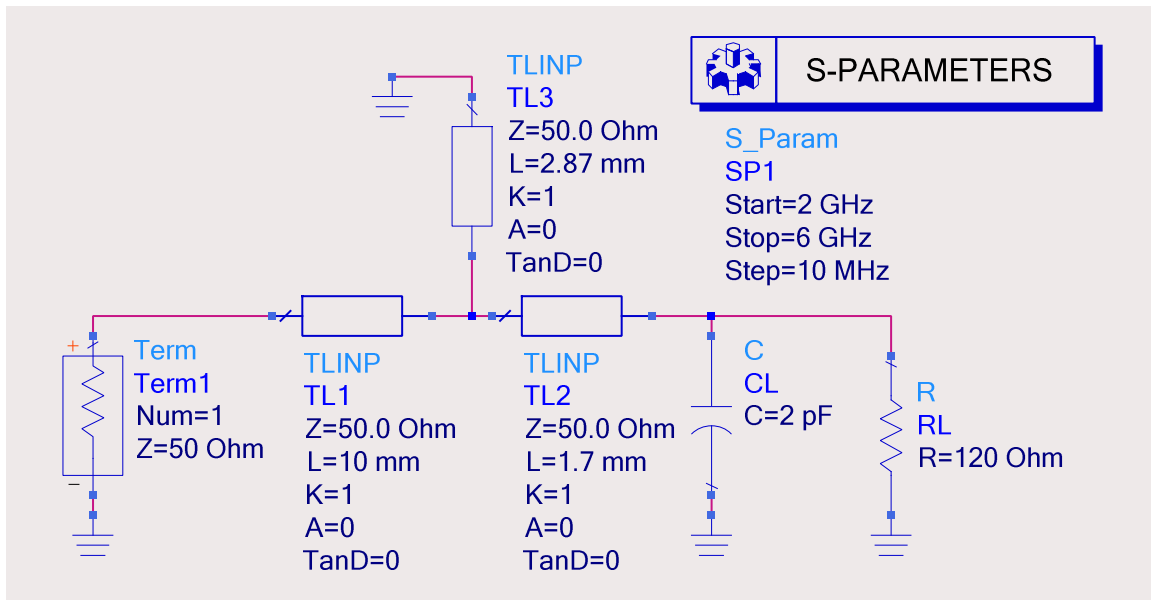
It is confirmed an excellent match at 4 GHz.

Solution 1 (from formulas)



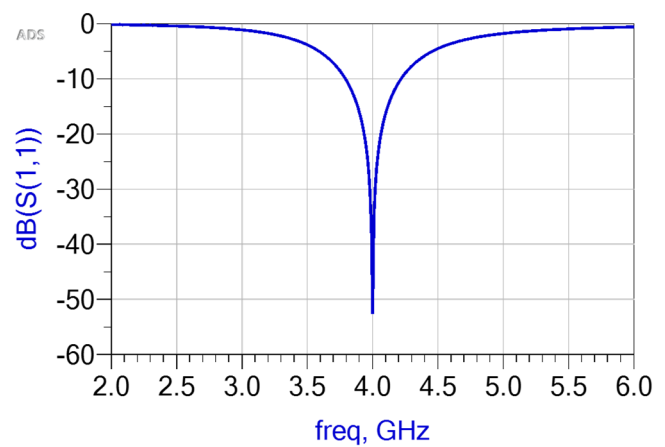
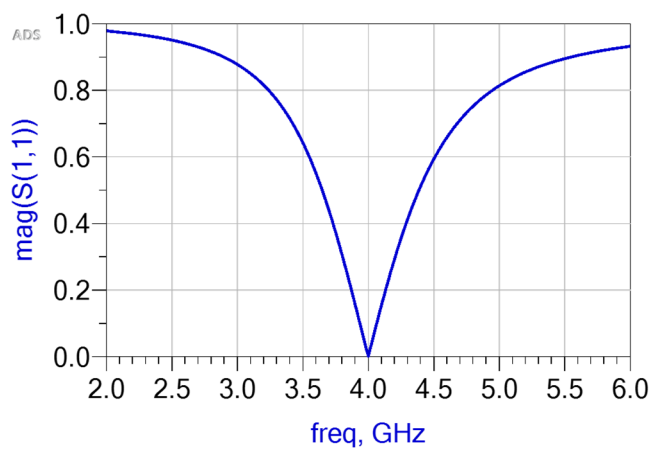
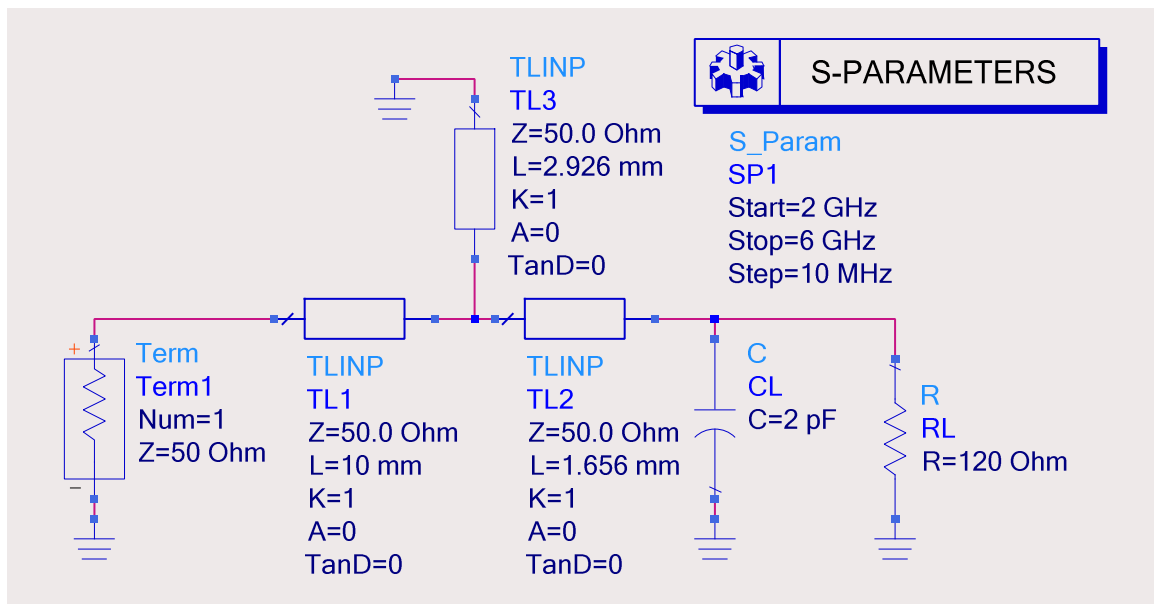
These responses are practically the same as those obtained in the previous case, where transmission lines were calculated using the Smith Chart.

Solution 2 (from Smith Chart)



It is seen that Solution 2 provides a larger matching bandwidth than Solution 1.

Solution 2 (from formulas)



These responses are practically the same as those obtained in the previous case, where transmission lines were calculated using the Smith Chart.