

December 8, 2022

NJG1187KG1

GNSS 2 stage LNA

**S-parameter, noise parameter
simulation data
Ver.2**

- s2p/s4p file
- s2p/s4p file extraction simulation circuit

Written by Ryo Sekiguchi

Approved by Susumu Takagi

Nisshinbo Micro Devices Inc.

Electronic Devices Business Headquarters
Technology Development Division
RF Product Development Department
RFIC Design Section



■ s2p/s4p fileSimulation condition

f=50MHz~5GHz, Step=10MHz

Ta=25°C,

Z_I=Z_S=50Ω

s2p file

V_{DD}=3.3V

I_{DD1}=4.3mA, I_{DD2}=3.4mA

s2p file at 1st LNA: NJG1187_1stLNA_Spara_v2.s2p

s2p file at 2nd LNA: NJG1187_2ndLNA_Spara_v2.s2p

s4p file

V_{DD}=3.3V

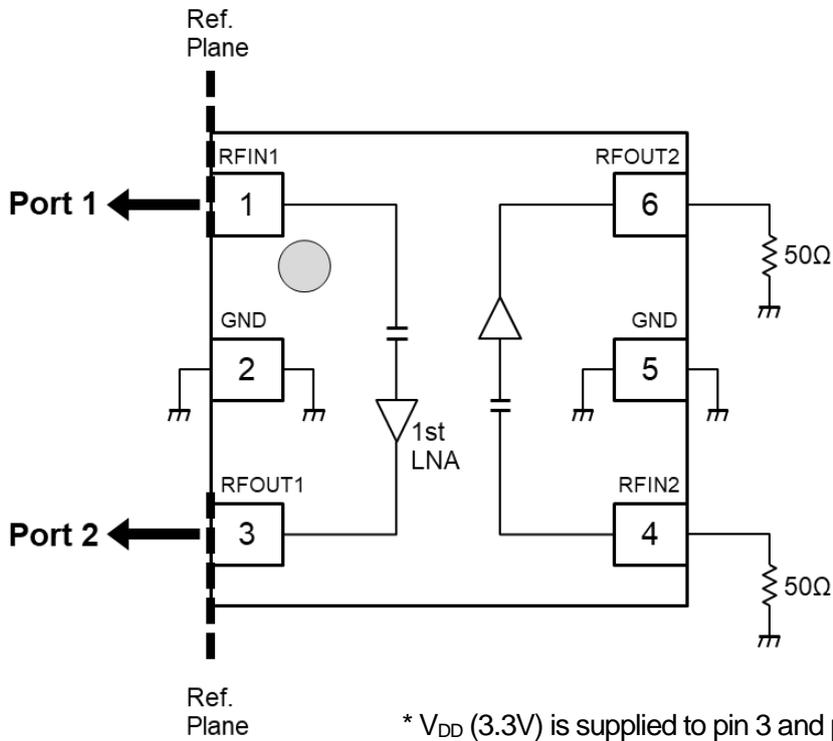
I_{DD1}=4.3mA, I_{DD2}=3.4mA

s4p file: NJG1187_Spara_v2.s4p

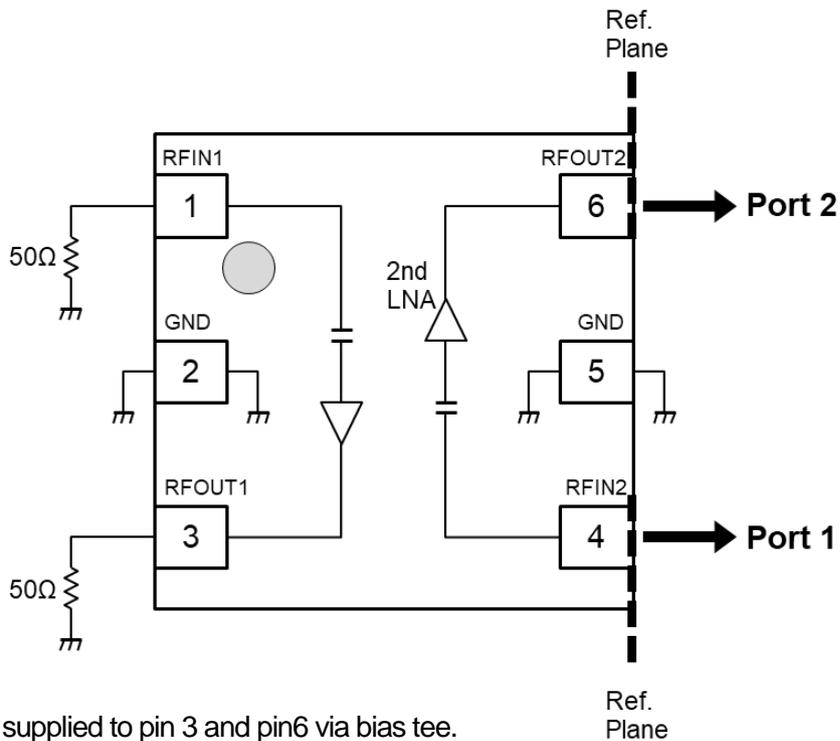


■ s2p file extraction simulation circuit

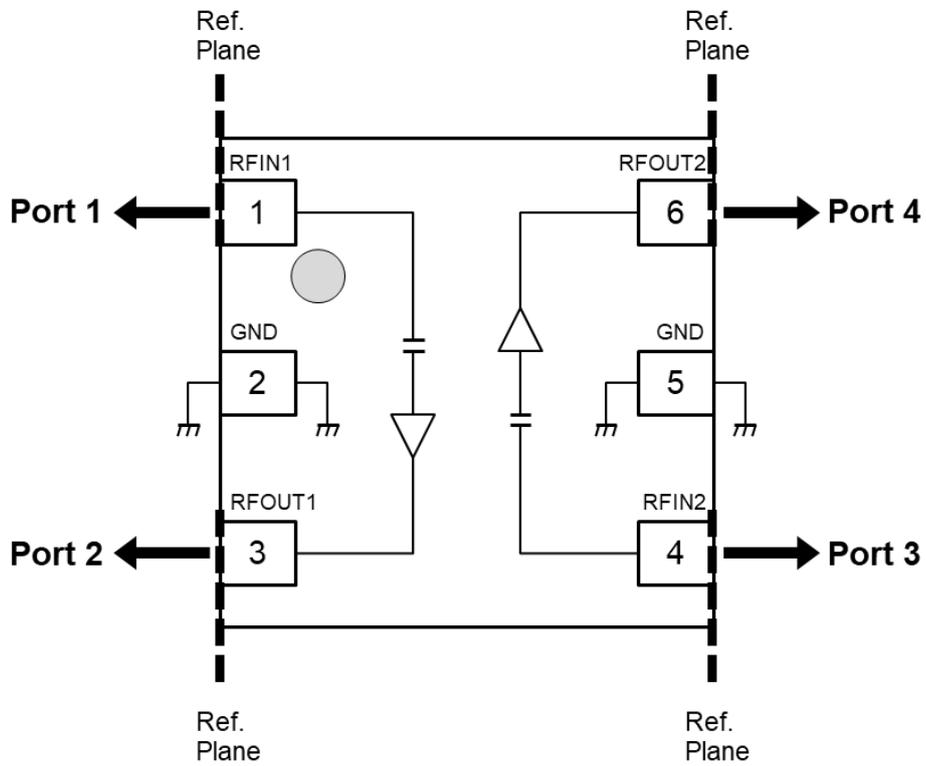
1st LNA



2nd LNA



■ s4p file extraction simulation circuit



* V_{DD} (3.3V) is supplied to pin 3 and pin6 via bias tee.