Abstracts

Low Noise Amplifiers Using Two Dimensional Electron Gas FETs

T. Mochizuki, K. Honma, K. Handa, W. Akinaga and K. Ohata. "Low Noise Amplifiers Using Two Dimensional Electron Gas FETs." 1985 MTT-S International Microwave Symposium Digest 85.1 (1985 [MWSYM]): 543-546.

Recently developed LNAs incorporating two dimensional electron gas (2 DEG) FETs for satellite communications earth stations are disclosed, which give epoch-making low noise as FET LNAs to operate. in the 2, 4, 12, and 20 GHz bands at room temperature, especially under cooled state. Typically detailed further is newly developed 4 GHz band LNA with 55 K max. noise temperature at room temperature, noise temperatures of the order of 30 K across 800 MHz bandwidth (3.4 to 4.2 GHz) under thermoelectrically (TE-) cooled state (about-45°C), which has been adopted in the new earth station conducted by KDD.

❑ Return to main document.