

## **Fabrication Process of n-AlGaAs/GaAs Schottky Diodes for on-chip Direct Integrated with Dipole Antenna**

### **ABSTRACT**

Schottky diodes are fabricated on n-Aluminium Gallium Arsenide / Gallium Arsenide (n-AlGaAs/GaAs) high-electron-mobility-transistor (HEMT) structure due to availability of high electron mobility and capability of fast switching performance. The processing steps used in the fabrication are the conventional steps used in standard GaAs processing. The ohmic and Schottky contacts of Schottky diodes are facilitated with ground-signal-ground (G-S-G) coplanar waveguide (CPW) transmission line structure so that it may provide the possibility of direct on-chip integration without insertion of a matching circuit with dipole antenna.