Construction and Performance Test of a 100 MeV Race Track Microtron, Y.S. CHO, K.H. CHUNG, T.Y. KIM, Seoul National Univ. - A 100 MeV Race Track Microtron has been designed and constructed. This machine will be used as the injector of a Superconducting Synchrotron Light Source[1]. Injection system has an electron gun (45 keV, 2 microseconds, 100 mA), a solenoid lens and a chicane magnet. The 5 MeV, 3 GHz standing wave accelerating column has been constructed and the rf system has a 2 MW Magnetron, rf circuits and a power modulator with Blumlein type PFN. Two bending magnets (1 T, 4% field gradients) with reverse field clamp had been constructed. A quadrupole magnet is used for beam focusing in the common orbit. All components have been assembled and the machine is under test. The result will be reported.

1 S.H. Kim, Y.S. Cho, T.Y. Kim, and K.H. Chung, "Pulsed VUV Synchrotron Radiation Source", Proc. Part. Acc. Conf. Dallas (1995) to be published.