

A Prototype Module of Superconducting Damped Cavities for KEKB, K. AKAI, K. ASANO, E. EZURA, T. FURUYA, K. HARA, K. HOSOYAMA, A. KABE, Y. KOJIMA, S. MITSUNOBU, Y. MORITA, H. NAKANISHI, T. TAJIMA, T. TAKAHASHI, T. TAKASHIMA, S. YOSHIMOTO, KEK; Y. ISHI, Y. KIJIMA, T. MURAI, Mitsubishi Electric Co.; K. SENNYU, Mitsubishi Heavy Industries, Ltd. - KEKB is an asymmetric electron-positron collider with two rings of 3.5 GeV x 2.6 A and 8 GeV x 1.1 A. Because of the heavy beam loading, the use of superconducting damped cavities is under investigation as well as normal conducting ones. For the feasibility study, a prototype module of a single cell niobium structure, which has a 850 kW coaxial-type input coupler and a pair of HOM ferrite dampers, has been constructed. The field gradient of 11.4 MV/m was achieved at the first cold test under no beam. This module will be installed in TRISTAN Accumulation ring for the beam test.