

HIGH POWER TEST OF INPUT COUPLERS AND HOM DAMPERS FOR KEKB SUPERCONDUCTING CAVITY

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Abstract

KEKB is continuously increasing the currents and so the superconducting cavities demand higher power input couplers and HOM dampers. Now input coupler powers are 350 to 400 kW, the powers will be increased to 500 and 600 kW soon. The coupling strength increased for 3 cavities by replacing the gasket with thinner one successfully at last summer's shutdown time. The spare couplers and doorknob transformers already tested up to 500 kW and 800 kW in a short time. The HOM dampers operating at 15 kW will be operate with 40 kW. The spare HOM dampers have been tested at 18 kW for SBP damper and 25 kW for LBP damper, and at this power level some super sonic acoustic sensors start to indicate some signals. So more higher power HOM dampers for future super B factory need thinner ferrite dampers.

NO SUBMISSION RECIEVED