The high average power THz radiation facility is now under construction in China Academy of Engineering Physics. The superconducting accelerator is one of the most important components for this facility, including two 4-Cell TESLA superconducting radio frequency cavities. The designed effective field gradients for both cavities are 10-12 MV/m. This paper will present the progress of the 2x4-cell superconducting accelerator, mainly including its construction and cryogenic test in Chengdu. At 2 K state, the cryomodule works smoothly and stably. The effective field gradients of both cavities have achieved 10 MV/m. Further beam loading experiments are now in progress.

Abstract

Introduction

Construction

Cryogenic test