# Abstracts

## An Optical Switch for High Temperature Superconducting Microwave Band Reject Resonators

*K.F. Raihn, N.O. Fenzi, E.R. Soares and G.L. Matthaei. "An Optical Switch for High Temperature Superconducting Microwave Band Reject Resonators." 1995 MTT-S International Microwave Symposium Digest 95.1 (1995 Vol. I [MWSYM]): 187-190.*

A method for optically switching High Temperature Superconducting (H-TS) band reject resonators is presented. Fast low loss switching of HTS filter elements enables digital selection of arbitrary pass-bands and stop-bands. Patterned pieces of GaAs or silicon are used in the manufacture of the two terminal photoconductive switches. Fiber optic cabling is used to transfer the optical energy from an LED to the switch. The fiber optic cable minimizes the thermal loading of the filter package and de-couples the switch's power source from the RF circuit. This paper will discuss the development and implementation of the optical switch and it's integration into a switched filter and switched filter-bank.

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