abstract We model the spectral energy distribution of the type 1 Seyfert galaxy NGC 5548, fitting data from simultaneous optical, UV, and X-ray monitoring observations. We assume a geometry consisting of a hot central Comptonizing region surrounded by a thin accretion disk. The properties of the disk and the hot central region are determined by the feedback occurring between the hot Comptonizing region and thermal reprocessing in the disk that, along with viscous dissipation, provides the seed photons for the Comptonization process. The constraints imposed upon this model by the multiwavelength data allow us to derive limits on the central black hole mass, $M \times 10^7$, the accretion rate, $2.5 \times 10^5 M_\odot \text{yr}^{-1}/M$, and the radius of the transition region between the thin outer disk and the geometrically thick, hot inner region, $\sim 2-5 \times 10^{14}$ cm.