

Ken-A-Vision RF Module

Theory of Operation

A SAW resonator drives the base circuit of transistor Q1. The output of Q1 drives the base of transistor Q2. The emitter voltage of Q2 is varied by the video-input signal supplied from the NTSC camera in the Video Flex. Q2 is used to modulate the RF signal. The output of Q2 is de-coupled and feeds a one-quarter wave antenna tuned to 915 MHz. All components except the SAW resonator are surface mount and located on the topside of the printed circuit board, with ground plane covering the bottom side.