

THIS IS A SUGGESTIVE AVALANCHE MODE SCHEMATIC THAT SHOLD WORK WITH THE TIP31C

This voltage provides an Avalanche mode for the transistor.
 Setting it to near 400V will produce a relaxation oscillator.
 The voltage will ramp up until spontaneous avalanche breakdown occurs
 Setting the voltage to something between 300 and 370 will result in a quiescent near breakdown state
 Sending in a 1V positive nim or other fast signal will instigate breakdown.

Output to Discriminator
 sets exact time of avalanche
 By monitoring the avalanche signal
 through the Collector Base capacitance.

