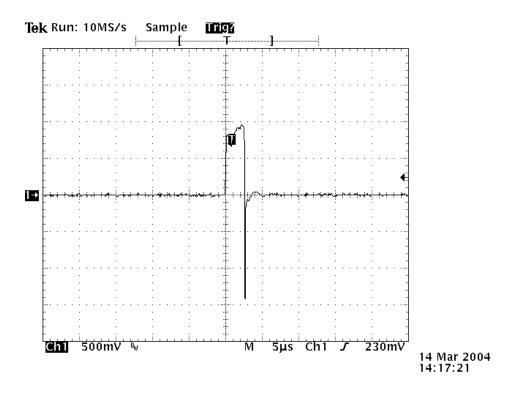
G204V Short Circuit Protect:



The vertical scale of the scope trace is 10A per division and the horizontal scale is 5 microseconds per division. The scope trigger was set to 15A and trigger mode was set to "Normal".

The drive current set was 7 amps per phase and the supply voltage was 80VDC. A short-circuit was placed across the winding and the scope recorded the results.

Current rose abruptly to about 19 amps. The short-circuit protect circuit response time was 2.5 microseconds. It shut down the drive by turning all 8 MOSFETs off. The negative going 28 amp pulse is the reverse recovery current in the MOSFET diodes as they take over carrying the phase current during decay.

Mariss Freimanis Geckodrive Inc. March 15, 2004