Abstract

This paper proposes a better family of PWM soft single switched (SSS) Boost converter topology with low voltage and current stresses in switches. Soft switching condition is carried out through single switch. In most of the converter topologies under zero current condition (ZCS) only the switch is triggered to on mode and switch is made to off mode under zero
voltage condition (ZVS). In a prototype model for soft turn on and turn off switch is applied to a boost(PWM) SSS converter, The operating principle of the converter topology is analyzed and its operating modes are studied. The experimental results of a prototype boost converter is compared with the theoretical analysis.

Reference


Index Terms

Computer Science

Power Electronics

Key words
Pulsewidth modulation (PWM)                     soft-single switched (SSS)
zero-current switching (ZCS)
zero-voltage switching (ZVS)