

Analysis and Implementation of Ripple Current Cancellation Technique for Electronic Ballasts

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ABSTRACT

This thesis evaluates the *effect* of a Ripple Current Cancellation method used for electronic ballasts. The design and analysis of a universal input 150 -W Boost Power Factor Correction converter with the Ripple Current Cancellation circuit is presented. In addition, the simulation model has been developed by using PSPICE. The advantages and disadvantages of the proposed Ripple Current Cancellation method are discussed and compared with the traditional filtering method. Experimental and simulation results are in excellent agreement.