International J. of Math. Sci. & Engg. Appls. (IJMSEA) ISSN 0973-9424, Vol. 4 No. IV (October, 2010), pp. 65-74

## AN ANALYSIS ON BRIDGELESS BOOST PFC CONVERTER

## **M.GOPINATH**

## Abstract

In this paper, a review of Bridgeless Boost power factor correction (PFC) converters is presented. Conventional boost PFC suffers from the high conduction loss in the input rectifier-bridge. The converter can operate with an excellent input power factor, continuous input and output currents, and has a bridgeless input that helps reduce conduction losses. Low conduction loss is the main advantage of bridgeless boost PFC topology. In order to decrease switching loss and further improve efficiency, a bridgeless boost PFC circuit is proposed. The bridgeless converter topology is to control input line current waveform as well as output DC voltage. The simulations were performed in MATLAB/Simulink program.

Ascent Publication House: http:// www.ascent-journals.com

Key Words : Conduction losses, Bridgeless, Power factor correction (PFC)