

DESIGN AND DEVELOPMENT OF DUAL OUTPUT DC – DC FORWARD CONVERTER

KUSUMA. R & JAYAPAL. R

Department of Electrical and Electronics Engineering, R V College of Engineering, Bangalore, Karnataka, India

ABSTRACT

The purpose of this paper is to implement MOSFET based high precision low size dual output DC-DC forward converter with current mode control operating at a switching frequency of 500KHz. The proposed design also has added feature of over temperature protection. In this design in addition to the voltage feedback the MOSFET current is also sensed which is fed back for faster response. The dual output of +15V and -15V with a output current of 0.75A and a power rating of 22.5W is achieved with the input voltage varying from 18V to 36V.

KEYWORDS: DC-DC Converter, Pulse Width Modulation