

SELF-COUPLED DRIVER
USED IN DUAL-SWITCH FORWARD POWER CONVERTER

ABSTRACT

A dual-switch forward power converter, and a method of operating the same, employs a self-coupled driver to achieve among other advantages higher efficiency, lower part count and component cost. In one aspect of the present invention, a power converter comprises a transformer and two switching transistors, and said transformer has two serially-connected primary windings with the first winding connected to a first switching transistor which is biased by a pulse controller, and the second winding couples the voltage across said first winding to bias the second switching transistor. In addition, the circuit on the primary side of said transformer further comprises means of dissipating magnetization current and the circuit on the secondary side comprises a rectifier and a low-pass filter.

Figure 4 accompanies the Abstract.