A New Criteria for Designing the Input Filters of Peak Current-Mode Controlled Converter

新的輸入濾波器設計準則於電流控制穩壓器

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Abstract

When an input filter is added to current-mode controller converter, the circuit could have oscillation response. A new transfer function of current loop is derived in this paper. According to this new transfer function of current loop, we found out the reason of the caused oscillation. Furthermore, four equations are derived for the criteria of designing the input filters.

Key words: Converter; Current mode control

關鍵字:轉換器;電流模式控制