

PWM Buck Controller with Fixed-off Time Switching Mode

Features

- 8.5 V to 19 V Input Supply Voltage Range
- Fast Average Current Control
- Fixed Off-time Switching Mode
- Analog Dimming Input
- PWM Dimming Input
- Over Current Protection with Skip Mode
- MOSFET Short Detection
- Thermal Shutdown

Applications

- LCD TV LED Backlighting
- DC-DC / AC-DC LED Driver Applications
- General LED Lighting

Description

The SM12TA is a high efficiency buck controller for LED applications which adopts an open loop average mode current control operating in a constant off-time mode, so no external compensation is needed. It features $\pm 2\%$ current accuracy, tight line and load regulation of the LED current. The device can be powered from a 8.5 V to 19 V supply and also features fast PWM dimming response. The Analog Dimming Input (ADIM) can accept a reference voltage of 0 V to 3 V. The SM12TA features over current protection, MOSFET short detection and thermal shutdown.

Device Information

Part	Package	Size
SM12TA	8 SOP	5 mm x 6 mm

Silicon Mitus cannot assume any responsibility for the consequence of use of information furnished nor for any infringement of patents or other rights of third parties which may result from its use. No Circuit patent licenses are implied. Silicon Mitus reserves the right to change the circuitry and specifications without notice at any time. This publication supersedes and replaces all information previously supplied. Silicon Mitus products are not authorized for use as critical components in life support devices or systems without the express written approval of Silicon Mitus.

© 2018 Silicon Mitus, Inc. - Printed in Korea - All Rights Reserved