

Power Factor Correction and PWM Controller 0.3mA 115kHz 20-Pin SO Tube

Manufacturer: <u>STMicroelectronics, Inc.</u>

Package/Case: SOP20

Product Type: Power Management ICs

RoHS: RoHS Compliant/Lead free

Lifecycle: Active



Images are for reference only



General Description

The L4981 I.C. provides the necessary features to achieve a very high power factor up to 0.99.

Realized in BCD 60II technology this power factor corrector (PFC) pre-regulator contains all the control functions for designing a high efficiency-mode power supply with sinusoidal line current consumption. The L4981 can be easily used in systems with mains voltages between 85V to 265V without anyline switch. This new PFC offers the possibility to work at fixed frequency (L4981A) or modulated frequency (L4981B) optimizing the size of the input filter; both the operating frequency modes working with an average current mode PWM controller, maintaining sinusoidal line current without slope compensation.

Besides power MOSFET gate driver, precise voltage reference (externally available), error amplifier, under voltage lockout, current sense and the soft start are included. To limit the number of the external components, the device integrates protections as overvoltage and overcurrent. The overcurrent level can be programmed using simple resistor for L4981A. For a better precision and for L4981B an external divider must be used.

Key Features

Limit line current distortion to <5%

Universal input mains

Feed forward line and load regulation

Average current mode PWM for minimum noise sensitivity

High current bipolar and DMOS totem pole output

Under voltage lockout with hysteresis and programmable turn on

Threshold overvoltage, overcurrent protection

Precise 2% on chip reference externally available

Soft-start





Recommended For You

TL431CDT

STMicroelectronics, Inc

SOP8

L4995JTR

STMicroelectronics, Inc

HSSOP12

L4931ABD33-TR

STMicroelectronics, Inc

SOP-8

TLA31ACZ-AP

STMicroelectronics, Inc

TO-92

TL431AIZ

STMicroelectronics, Inc

TO-92

L4974A

STMicroelectronics, Inc

DIP20

L4981AD

STMicroelectronics, Inc

SOP20

L4978

STMicroelectronics, Inc

DIP8

L4984D

STMicroelectronics, Inc

SSOP10

TLA31CL3T

STMicroelectronics, Inc

SOT23

L4941BV

STMicroelectronics, Inc

TO220

L4981AD013TR

STMicroelectronics, Inc

SOP20

L4979MD013TR

STMicroelectronics, Inc

SOP-20

TL431ACZ

STMicroelectronics, Inc

TO-92

L4953G

STMicroelectronics, Inc

ZIP15