

STR-L400 Series

Power IC for Quasi-Resonant Type Switching Power Supply with High Efficiency, Low Noise Low-Height, and Enough Creepage Isolation (>6mm) between High and Low Voltage Terminals

■ General Descriptions

The STR-L400 series products are power ICs for quasi-resonant switching type power supplies, incorporating a power MOSFET and a controller IC in the SIP-10 package.

The product achieves high efficiency and low noise power supply systems by the quasi-resonant operation. The product is recommended for the systems requiring low-height and enough clearance and creepage isolation between high and low voltage terminals.



■ Features

- Quasi-Resonant Operation
- Current-Mode Control
- Built-in Oscillator for Low Frequency Operation
 The operation with low frequency of 50µs OFF time (around 22 kHz), until the quasi-resonant signal becomes valid, reduces the stress on components at startup and load-shorted.
- SIP-10 Package (Sanken designation: STA-10L), recommended for auxiliary power supplies of White Goods. Straight lead pitch: 2.54mm, Height over PCB: < 12mm
 - Clearance and Creepage Isolation on PCB between high and low voltage terminals: 6.5mm (4 pins removed)
- Input Compensation at Overcurrent

The function reduces the distortion of overcurrent operation point to AC input voltage change by adding three components.

- Built-in Avalanche Energy Guaranteed High-Voltage Power MOSFET
- Various Protections

Overcurrent Protection (OCP)	Pulse-by-Pulse
Overload Protection (OLP)	Latch Shutdown
Thermal Shutdown Protection (TSD)	Latch Shutdown

■ Applications

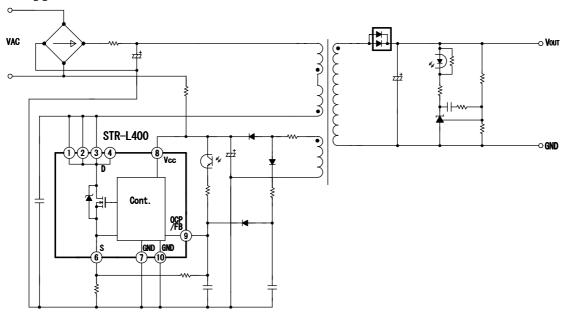
Switching Power Supplies for

Standby Power Supplies, Home Appliances (White Goods), Digital Consumer Equipment, OA Equipment, Industry Machines, Communication Devices, Others

■ Product Lineup

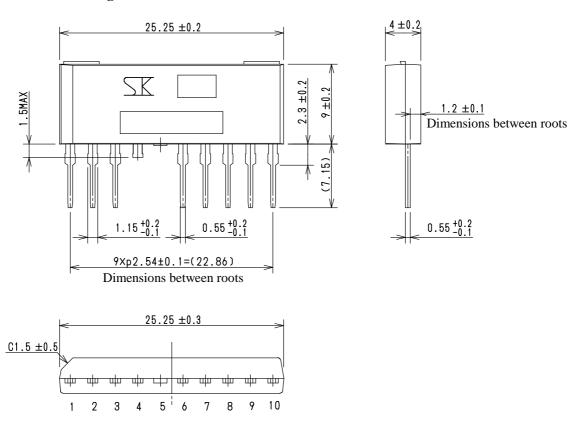
Product No	MOSFET V _{DSS} MIN(V)	$R_{\mathrm{DS(ON)}}$ max (Ω)
STR-L451	650	3.95
STR-L472	900	7.7

■ Typical Application Circuit



■ Package Information

SIP-10 (Sanken designation: STA-10L)



Warnin

- The contents in this document are subject to changes, for improvement and other purposes, without notice
 Make sure that this is the latest version of the document before use.
- The operation and circuit examples in this document are provided for reference purposes only. Sanken assumes no liability for violation of industrial property, intellectual property, or other rights of Sanken or third parties, that stem from these examples.
- The user must take responsibility for considering and determining which objects the products in this document are used with.
 Although Sanken will continue to improve the quality and reliability of its products,
- Failurgan sanker will continue to improve the quarry and relationsty of its products, semiconductor products, by their nature, have certain fault and failure rates. The user must take responsibility for designing and checking to secure the device and system so that a part failure may not lead to human injury, fire, damages, or other losses.
- The contents in this document must not be transcribed or copied without Sanken's written consent.