

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

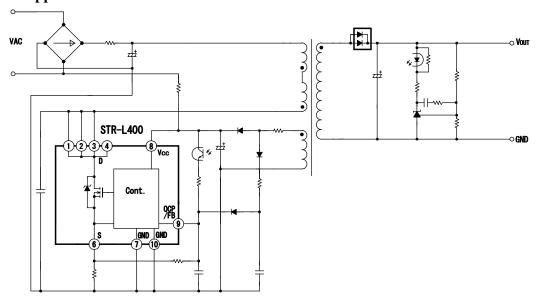
Switching Power Supplies for

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

■ Product Lineup

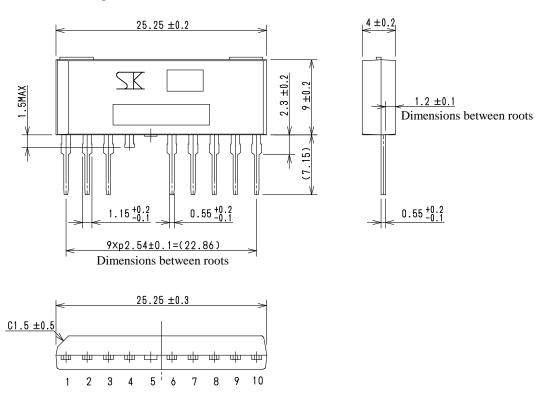
Product No	MOSFET V _{DSS} MIN(V)	$R_{\mathrm{DS(ON)}}$ max (Ω)
STR-L451	650	3.95
STR-L472	900	7.7

■ Typical Application Circuit



■ Package Information

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



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