

STR-A6200 Series

PWM, Low EMI, Auto Burst Standby

Low Power Off-line SMPS Primary Switcher

Feature

● PWM operational frequency jittering

The frequency jittering function enables cost reduction of EMI noise filtering circuit by suppressing EMI noise.

The center frequency of PWM operation is set to $50 \, \text{KHz}$, and the frequency jittering provides variation of $+/-2 \, \text{KHz}$, which is adjustable by the external capacitor.

• Over Load Protection with the integrated timer (Auto restart)

The IC integrates the delay timer circuit to trip the over load protection, which excludes necessity of any external component for that purpose, and enables reductions of both and PCB design area.

• Over current protection with constant current operation

Constant output current operation is realized by simply adding two external resistors.

• Auto burst standby operation

Reduces standby input less than 100mW at zero load and AC264V

• Soft start

Reduces stress to the integrated power MOSFET during startup

• Less transformer's audible noise during the bust mode operation

• Start-up circuit

Thanks to the proprietary 900V BCD process, the integrated startup circuit, which is connected to the internal MOSFET's drain to power the control circuit, simplifies the peripheral circuit design and improves the system efficiency.

Current Mode Feedback Control

• Leading Edge Blanking

Avoids operational malfunctioning resulted by surge current during turn-on period, and eliminates necessity of a surge filtering circuit.

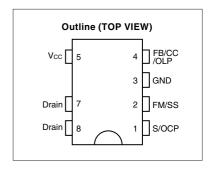
Avalanche energy guaranteed MOSFET

Simplifies a design of surge absorption circuit, and does not require derating to the breakdown voltage.

Various protections

Over current protection (OCP) Pulse By Pulse Over load protection (OLP) Auto Restart Over voltage protection (OVP) Latch Thermal shut down (TSD) Latch

Package (DIP-8)



Application

• Battery charger Cellular phone, Digital camera, Video camera, Electrical shaver, Emergency lighting system, etc.

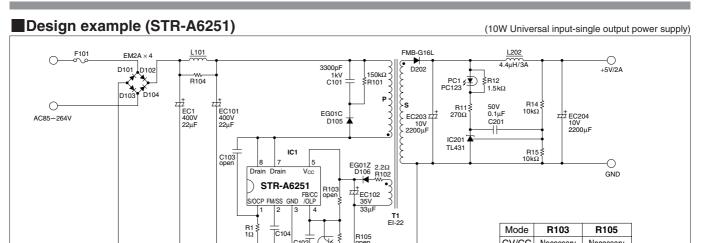
• Standby power supply CRT-TV, Projection-TV, LCD-TV, PDP-TV, Desk Top PC, LBP, Audio system

• Small power S.M.P.S ······· Inc jet printer, DVD player/recorder, VCR, CD player, Set top box, Air conditioner, refrigerator, washing machine, dish washer

Product Lineup

Part Number	Fosc (kHz)	MOS FET VDSS (V)	Rds (on) (Ω)	Pout 230V Narrow / 85V-264V Wide
STR-A6252	50	650	2.8	24W/20W
STR-A6252M	67			
STR-A6251	50	650	3.95	21W/15W
STR-A6251M	67			
STR-A6259M	67	650	6.0	17W/13W
STR-A6259H	100			
STR-A6269M	67	800	19.2	10W/6W
STR-A6269H	100			

STR-A6200 Series



CV/CC

Necessary

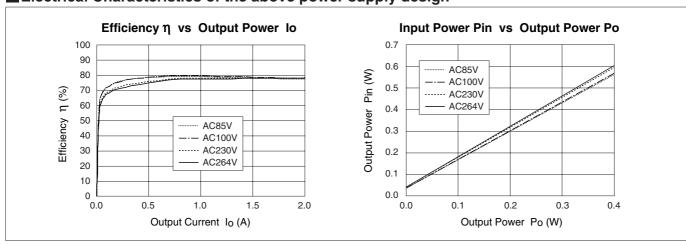
OLP Unnecessary Unnecessary

Necessary

■ Electrical Characteristics of the above power supply design

0.022ul

4700pl



ACAUTION / WARNING

- Sanken reserves the right to make changes without further notice to any products herein in the interest of improvements in the performance, reliability, or manufacturability of its products. Before placing order, Sanken advises its customers to obtain the latest version of the relevant information to verify that the information being relied upon is
- Application and operation examples described in this document are supplementary and conditions and variation in additional parts are not considered. When using the products herein, the applicability and suitability of such products for the intended purpose or object shall be reviewed at the users responsibility.
- Application and operation examples described in this document are quoted for the sole purpose of reference for the use of the products herein and Sanken can assume no responsibility for any infringement of industrial property rights, intellectual property rights or any other rights of Sanken, or any third party which may result from its use.
- Although Sanken undertakes to enhance the quality and reliability of its products, the occurrence of failure and defect of semiconductor products at a certain rate is inevitable. Users of Sanken products are requested to take, at their own risk, preventative measures including safety design of the equipment or systems against any possible injury, death, fires or damages to society die to device failure or malfunction.
- ullet This publication shall not be reproduced in whole or in part without prior written approval form Sanken.

Sanken SANKEN ELECTRIC CO.,LTD.

Tokyo Office	1-11-1 Nishi-Ikebukuro, Toshima-ku, Tokyo,	JAPAN PHONE: +81-3-3986-	6164 FAX: +81-3-3986-8637			
Overseas Sales	Offices					
Asia	Sanken Electric Singapore Pte. Ltd.	PHONE: +65-291-4755	FAX: +65-297-1744			
	150 Beach Road, #14-03 The Gateway Wes	t, Singapore 0718				
	Sanken Electric Hong Kong Co., Ltd.	PHONE: +852-2735-5262	FAX: +852-2735-5494			
	1018 Ocean Centre, Canton Road, Kowloon,	, Hong Kong				
	Sanken Electric Shanghai Co., Ltd.	PHONE: +86-21-5208-1177	FAX: +86-21-5208-1757			
	Room3202, Maxdo Centre, Xingyi Road 8, Changning district, Shanghai, China.					
	Taiwan Sanken Electric Co., Ltd.	PHONE: +886-2-2356-8161	FAX: +886-2-2356-8261			
	Room1801, 18th Floor, 88 Jung Shiau East Road, Sec.2, Taipei 100, Taiwan R.O.C.					
	Sanken Electric Korea Co., Ltd.	PHONE: +82-2-714-3700	FAX: +82-2-3272-2145			
	SK Life Bldg. 6F, 168 Kongduk-dong, Mapo-	ku, Seoul, 121-705, Korea				
North America	Allegro MicroSystems,Inc.	PHONE: (508)-853-5000	FAX: (508)-853-7861			
	115 Northeast Cutoff, Box 15036 Worcester,	Massachusetts 01615, U.S.A.				
Europe	Allegro MicroSystems, Europe Limited.	PHONE: 01932-253355	FAX: 01932-246622			
	Balfour House, Churchfield Road, Walton-on	-Thames, Surrey KT12 2TD, U.K	ζ.			

STR-A6200 series

External Dimensions

