

Product Summary Sheet

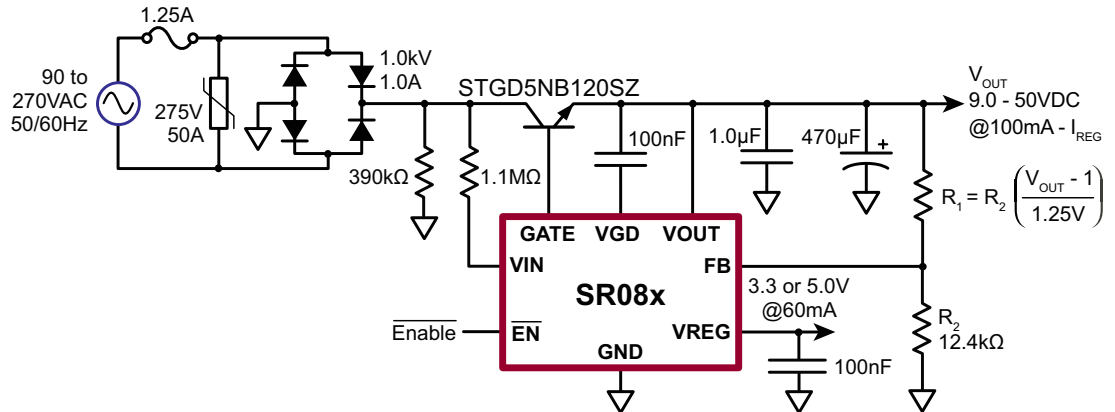
Applications:

- ▶ White Goods
- ▶ Household Appliances
- ▶ Lighting Controls
- ▶ Circuit Breakers
- ▶ Keep-Alive Supplies



8-Lead SOIC (SG)

Adjustable Off-Line Inductorless Switching Regulators



Typical Application Circuit

Product Overview:

The Supertex SR086 and SR087 are inductorless switching regulators designed to operate directly from a rectified AC line. The operating principle is to turn on a pass transistor when the rectified AC is below the output voltage, and to turn it off when the output voltage reaches a specific level. A linear regulator supplied by V_{OUT} provides an additional fixed 3.3V output (SR086) or 5.0V output (SR087). Efficiencies of around 55% may be realized for loads up to 1.0W in 120VAC applications, with around 50% efficiencies for loads up to 800mW in 230VAC applications.

A logic-level enable input allows the SR086 and SR087 to be disabled – useful when they are employed as keep-alive power supplies.

The SR086 and SR087 meet FCC and CISPR requirements for conducted emissions for combined loads of less than 20mA.

WARNING! Galvanic isolation is not provided.

Features:	Benefits:
No magnetics or HV caps	Lower cost, less bulk
Single BOM for 120V and 230V	Same power supply circuit can be used internationally, saves cost on inventory for two different power supplies
Adjustable output	Adaptable to many applications
Dual output	No need for secondary regulation, lower part count, saves money
Enable input	Allows use as keep-alive supply
SR08x sees only low voltage	Transient immunity solely dictated by rectifier, resistor, and IGBT voltage rating (STGD5NB120SZ is rated at 1.2 kV)



Adjustable Off-Line Inductorless Switching Regulator

Ordering Information / Availability

Part Number	Package Option	Samples	Lead Time
SR086SG-G	8 Pin SOIC (Green)	Now	4-5 Weeks
SR087SG-G	8 Pin SOIC (Green)		

-G indicates the part is RoHS compliant (Green).



Product Contact

For any questions regarding the SR086 and SR087, please contact your local area Supertex sales office, or contact the main office in the US at:

Telephone: 800-222-8888
 Fax: 408-222-4895
 EMail: mktg@supertex.com
 Website: www.supertex.com

Supertex inc.

1235 Bordeaux Drive, Sunnyvale, CA 94089