

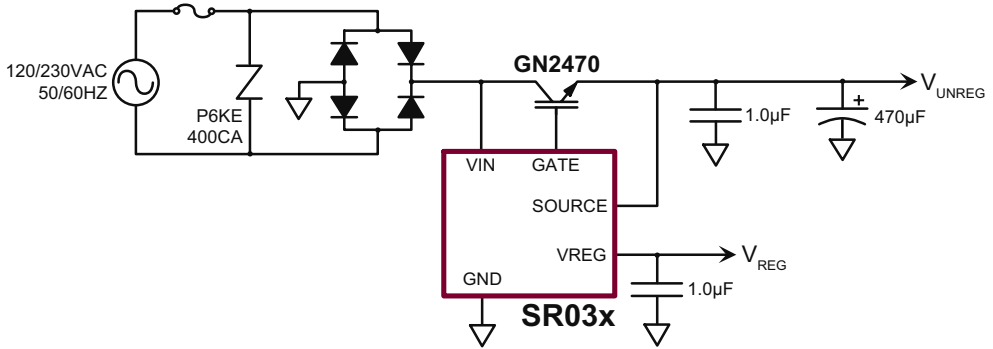
Product Summary Sheet

GN2470

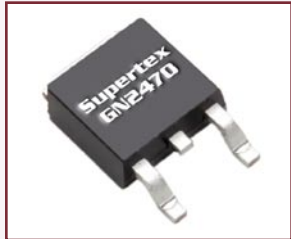
Insulated Gate Bipolar Transistor

Applications:

- ▶ White goods
- ▶ Small appliances
- ▶ Lighting controls
- ▶ Motor drives
- ▶ Meter readers
- ▶ Small off-line power supplies



Switching Waveform and Test Circuit



3-Lead TO-252 (K4)

Product Overview:

The Supertex GN2470 is an insulated gate bipolar transistor (IGBT) that combines the positive aspects of both BJTs and MOSFETs.

The GN2470 is designed to work in conjunction with the Supertex SR036 and SR037 inductorless off-line switching regulators. The use of the IGBT instead of a FET provides a lower voltage drop at higher currents providing higher output power and making it suitable for a broader array of applications along with the SR036 and SR037.

The SR03X is an inductorless switching regulator featuring dual, non-isolated outputs. It does not require any transformers, inductors or high voltage capacitors. The input voltage operates from an unfiltered full wave rectified 120V AC or 230V AC line and is designed to control an external N-channel MOSFET or IGBT. The Supertex SR036 and SR037 have 30-40% conversion efficiency, which is higher than the linear regulator approach but comparable in cost and simplicity. In sub 1.5 watt applications like white goods, small appliances and lighting controls, the Supertex SR036 and SR037 will take up less space and cost less than standard off-line switching power supplies that need magnetics and high voltage capacitors.

For use in conjunction with Supertex SR036 and SR037 Inductorless Switchers

Features:	Benefits:
GN2470's low voltage drop at high current vs. a MOSFET	Provides higher output power supporting broader applications. Increases the power converter efficiency by 30%
GN2470's 700V breakdown voltage rating	More immunity to transients. Eases selection of TVS required for off-line switching regulators
No transformers or inductors	Saves money and PCB space
No high voltage capacitors needed	Saves money and PCB space
Universal input: 110V or 230V AC	Same power supply circuit can be used internationally, saves cost of inventory for two different power supplies
Dual outputs (1 regulated and 1 unregulated) for SR036 and SR037	No need for secondary regulation saves money

Supertex inc.



GN2470

Insulated Gate Bipolar Transistor

Ordering Information / Availability

<u>Part Number</u>	<u>Package Option</u>	<u>Samples</u>	<u>Product Availability</u>
GN2470K4-G	3-Lead TO-252 (Green)	Now	4-6 Weeks ARO

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



Product Contact

For any questions regarding the GN2470 please contact your local area Supertex sales office, or contact the main office in the US at:

Telephone: 800-222-9883
Fax: 408-222-4895
E-mail: mktg@supertex.com
Web site: www.supertex.com

Supertex inc.
1235 Bordeaux Drive, Sunnyvale, CA 94089