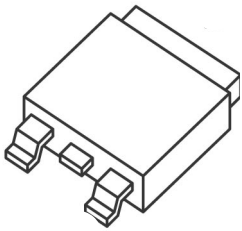


Product Summary Sheet

Applications

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

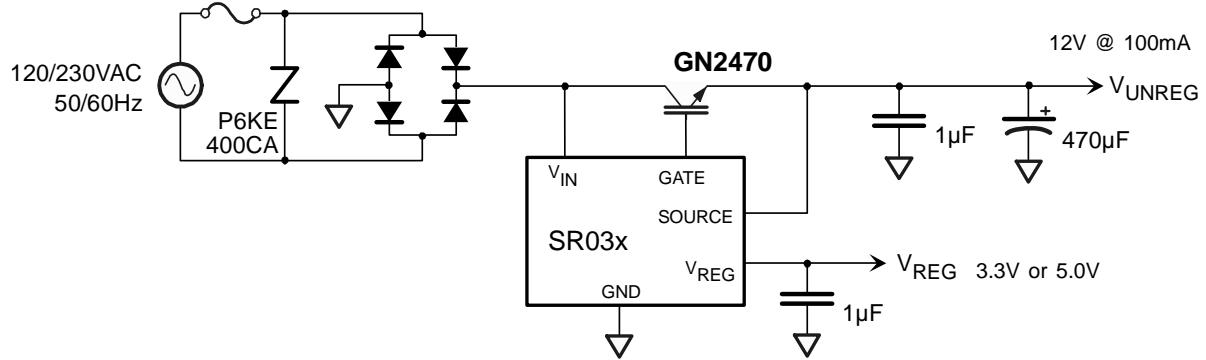
Package Type



3-pin D-Pak (K4)

GN2470 Insulated Gate Bipolar Transistor

For use in conjunction with Supertex SR03x Series of Inductorless Switchers



Typical Application Circuit

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 SR03x series of 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 SR03x series has 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 SR03x will take up less space and cost less than standard off-line switching power supplies that need magnetics and high voltage capacitors.

Features of GN2470 & SR03x Solution:

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 SR03X	No need for secondary regulation saves money

GN2470

Insulated Gate Bipolar Transistor

Typical Performance

<u>Device</u>	<u>Breakdown Voltage</u>	<u>I_{C(continuous)}</u>	<u>I_{C(pulsed)}</u>
GN2470	700V	1.0A	3.5A

Ordering Information / Availability

<u>Part Number</u>	<u>Datasheet</u>	<u>Samples</u>	<u>Lead Time</u>
GN2470	GN2470 Now	GN2470K4 Now	4 - 5 weeks ARO

Product Contact

If you have any questions regarding the GN2470, samples, contact Supertex Applications at:

Telephone: (800) 222-9883
Fax: (408) 222-4895
Email: apps@supertex.com
Web: www.supertex.com

Supertex Sales: Contact your local Area Sales Office

Supertex inc.
1235 Bordeaux Drive, Sunnyvale, CA 94089