

## Infineon Bridge Rectifier



ENERGY EFFICIENT circuit design could have these days crucial significance for the success of a product.

Since decades bridge rectifier is the state of the art for circuit for all DC Power supply. A bridge rectifier makes use of four diodes in a bridge arrangement to achieve full-wave rectification. The energy efficiency of a rectifier is determined by the forward voltage drop and the switching speed of the diodes.

Rectifiers build by Schottky have such a very low forward voltage drop and switching speeds that approach zero time. This makes them ideal for energy efficient output stages of switching power supplies.

The full bridge rectifier is coming in the tiny SOT143 .

### Key Features:

- Schottky Diode rectifier with fast switching speed and low voltage drop for high energy efficiency rectifiers
- Very small systems
- Full bridge and Half bridge combinations available
- Suitable also for advanced reverse polarity protection

### Target Applications:

- Rectifier for LED illumination
- Energy saving Lamps
- Mobil Battery charger (Mobil-Phones, Digital-Cameras, PDAs)
- Toys

Type	Product	Package	Configuration	VR (V) max	VRrms (V) max	IF (mA) max
Schottky bridge rectifier	BAS3007A-RPP	SOT143	Full Bridge	30	21	900
	BAS4002A-RPP	SOT143	Full Bridge	40	28	200
	BAT240A	SOT23	Half Bridge	240	170	400
PN diode bridge rectifier	BGX50A	SOT143	Full Bridge	70	50	140

[www.infineon.com/schottkydiodes](http://www.infineon.com/schottkydiodes)

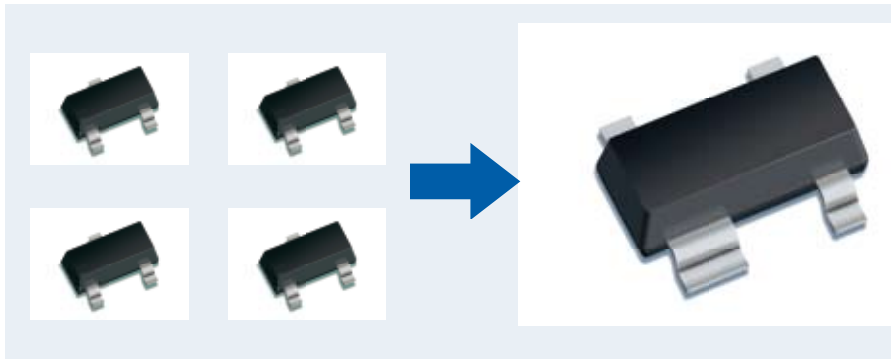
## Small Signal Discretes



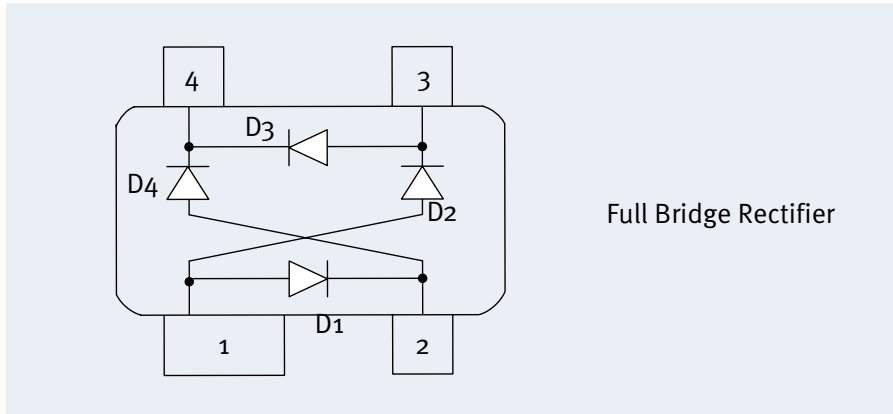
Never stop thinking

# Product Brief

Save space by replacing four diodes by a single pack full bridge rectifier

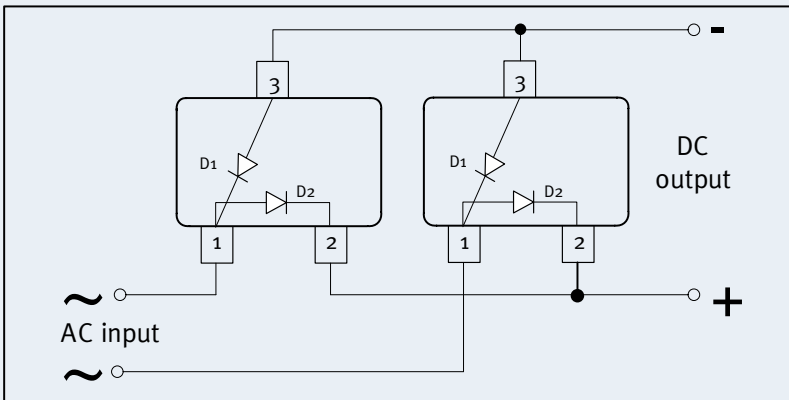


PIN Configuration in SOT143



Application Example BAT24DA

Application example BAT 240A  
Energy efficient bridge rectification for 110V / 60Hz power lines



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