## 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	S0T143	Full Bridge	30	21	900
	BAS4002A-RPP	S0T143	Full Bridge	40	28	200
	BAT240A	S0T23	Half Bridge	240	170	400
PN diode bridge rectifier	BGX50A	S0T143	Full Bridge	70	50	140

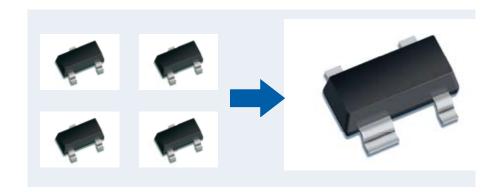
www.infineon.com/schottkydiodes

## **Small Signal Discretes**

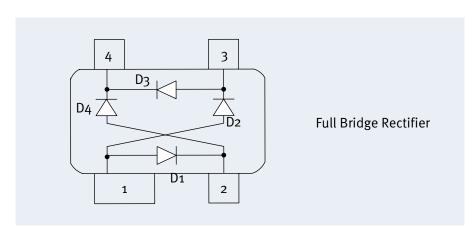


Never stop thinking

## **Product Brief**

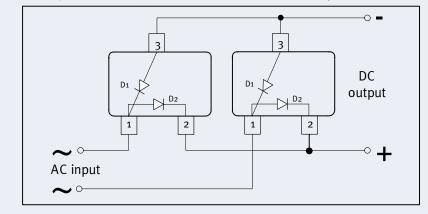


Save space by replacing four diodes by a single pack full bridge rectifier



PIN Configuration in SOT143

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



Application Example BAT24DA

How to reach us: http://www.infineon.com

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Largest Supplier of Electrical and Electronic Components

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SS3003CH-TL-E GA01SHT18 CRS10I30A(TE85L,QM MA4E2501L-1290 MBRB30H30CT-1G SB007-03C-TB-E SK32A-TP SK33B-TP
SK38B-TP NRVBM120LT1G NTE505 NTSB30U100CT-1G SS15E-TP VS-6CWQ10FNHM3 ACDBA1100LR-HF ACDBA1200-HF
ACDBA140-HF ACDBA2100-HF ACDBA3100-HF CDBQC0530L-HF ACDBA340-HF ACDBA260LR-HF ACDBA1100-HF SK310B-TP
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