



New Product

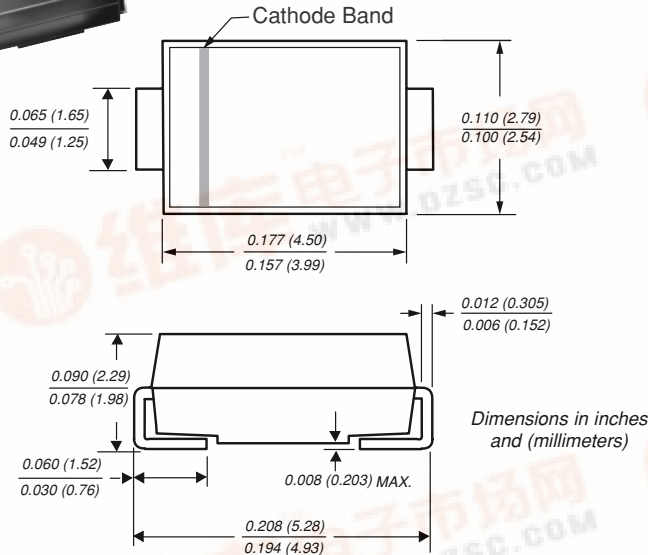
# B230LA & B240A

Vishay Semiconductors  
formerly General Semiconductor

## High-Current Density Surface Mount Schottky Rectifier

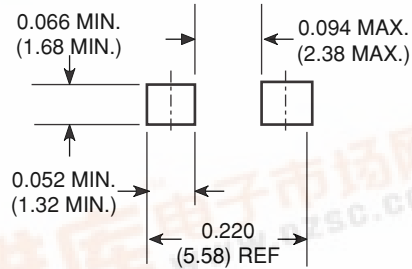


DO-214AC (SMA)



Reverse Voltage 30 & 40 V  
Forward Current 2.0 A

Mounting Pad Layout



### Features

- Low power loss, high efficiency
- Low profile surface mount package
- Built-in strain relief
- For use in low voltage high frequency inverters, free wheeling, and polarity protection applications
- Guardring for overvoltage protection
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0

### Mechanical Data

**Case:** JEDEC DO-214AC molded plastic body  
**Terminals:** Solder plated, solderable per MIL-STD750, Method 2026  
 High temperature soldering guaranteed: 250°C/10 seconds at terminals  
**Polarity:** Color band denotes cathode end  
**Weight:** 0.002 ounce, 0.064 gram

### Maximum Ratings and Thermal Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Symbol	B230LA	B240A	Unit
Device marking code		B23	B24	V
Maximum repetitive peak reverse voltage	V <sub>RRM</sub>	30	40	V
Maximum RMS voltage	V <sub>RMS</sub>	21	28	V
Maximum DC blocking voltage	V <sub>DC</sub>	30	40	V
Maximum average forward rectified current at T <sub>L</sub> (See Fig. 1)	I <sub>F(AV)</sub>	2.0		A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	50		A
Typical thermal resistance <sup>(2)</sup>	R <sub>θJA</sub> R <sub>θJL</sub>	110 28		°C/W
Voltage rate of change (rated V <sub>R</sub> )	dv/dt	10,000		V/μs
Operating junction temperature range	T <sub>J</sub>	-65 to + 150		°C
Storage temperature range	T <sub>STG</sub>	-65 to + 150		°C

### Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

Parameter	Symbol	Max.	Max.	Unit
Maximum instantaneous forward voltage at 2.0A <sup>(1)</sup>	V <sub>F</sub>	0.50	0.55	V
Maximum DC reverse current at rated DC blocking voltage <sup>(1)</sup>	I <sub>R</sub>	0.5	0.5	mA

Notes: (1) Pulse test: 300μs pulse width, 1% duty cycle  
 (2) Aluminum substrate mounted

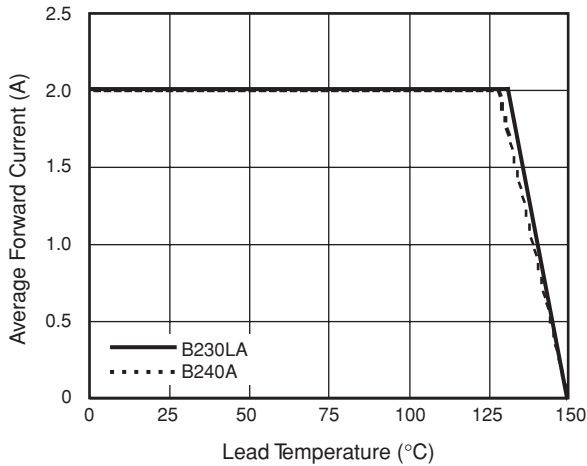
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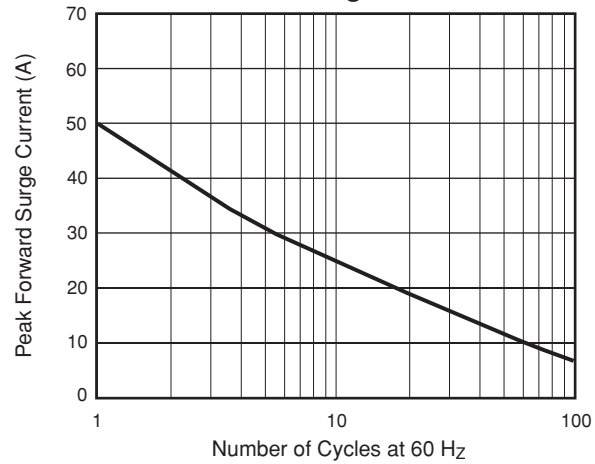
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## Ratings and Characteristic Curves (T<sub>A</sub> = 25°C unless otherwise noted)

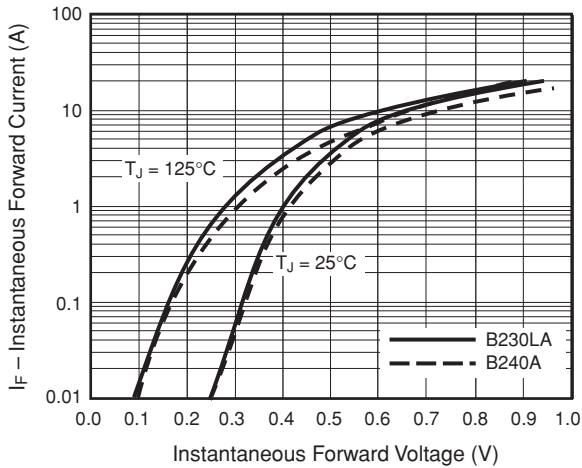
**Fig. 1 – Forward Current Derating Curve**



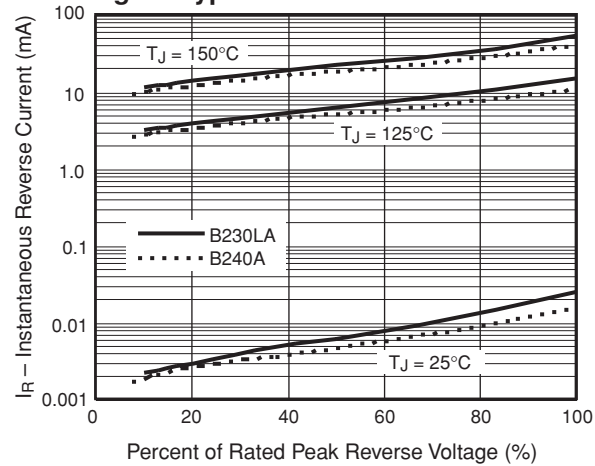
**Fig. 2 - Maximum Non-Repetitive Peak Forward Surge Current**



**Fig. 3 - Typical Instantaneous Forward Characteristics**



**Fig. 4 - Typical Reverse Characteristics**



**Fig. 5 - Typical Junction Capacitance**

