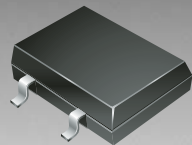


\*RoHS COMPLIANT



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## Features

- Lead free device (RoHS compliant\*)
- Small SMT package
- High reliability with superior moisture resistance
- Applicable to automatic insertion

## Applications

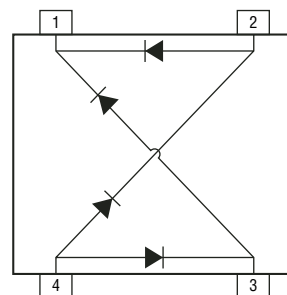
- Switching power supply
- Home appliances, office equipment
- Telecommunication, factory automation

# CDNBS04-B08200~B08800 Surface Mount Rectifier

### General Information

The CDNBS04-B08200~B08800 device provides Bridge Rectification with high reliability with superior moisture resistance for home appliances, office equipment and telecommunications.

The device provide 0.8 A rectification with a choice of repetitive peak reverse voltages from 200 V to 800 V. The device measures 5 mm x 7 mm and is available in a 4 lead SMT package intended to be mounted directly onto an FR4 printed circuit board.



### Electrical Characteristics (@ T<sub>A</sub> = 25 °C Unless Otherwise Noted)

Parameter	Symbol	CDNBS04-				Unit
		B08200	B08400	B08600	B08800	
Maximum Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	200	400	600	800	V
Maximum RMS Voltage	V <sub>RMS</sub>	140	280	420	560	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	200	400	600	800	V
Maximum Average Forward Rectified Current @ T <sub>A</sub> = 40 °C <sup>1</sup>	I <sub>(AV)</sub>	0.8				A
Maximum DC Reverse Current @ T <sub>J</sub> = 25 °C	I <sub>R</sub>	5				μA
Maximum DC Reverse Current @ T <sub>J</sub> = 100 °C	I <sub>R</sub>	100				μA
Maximum Forward Voltage @ 0.4 A DC	V <sub>F</sub>	1.15				V
I <sup>2</sup> t Rating for Fusing (T < 8 ms)	I <sup>2</sup> t	3.7				A <sup>2</sup> S
Maximum Recovery Time	T <sub>RR</sub>	150		200	500	ns
Typical Thermal Resistance <sup>2</sup>	R <sub>θJA</sub>	50				°C/W
Typical Junction Capacitance per element <sup>3</sup>	C <sub>J</sub>	13				pF
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	30				A

Notes:

1 Mounted on PC Board. See Forward Derating Curve.

2 Thermal Resistance from Junction to Ambient.

3 Measured at 1 MHz and applied Reverse Voltage of 4.0 VDC.

### Thermal Characteristics (@ T<sub>A</sub> = 25 °C Unless Otherwise Noted)

Parameter	Symbol	CDNBS04-B08200~B08800	Unit
Operating Temperature Range	T <sub>J</sub>	-55 to +150	°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150	°C

\*RoHS Directive 2002/95/EC Jan 27 2003 including Annex.

Specifications are subject to change without notice.

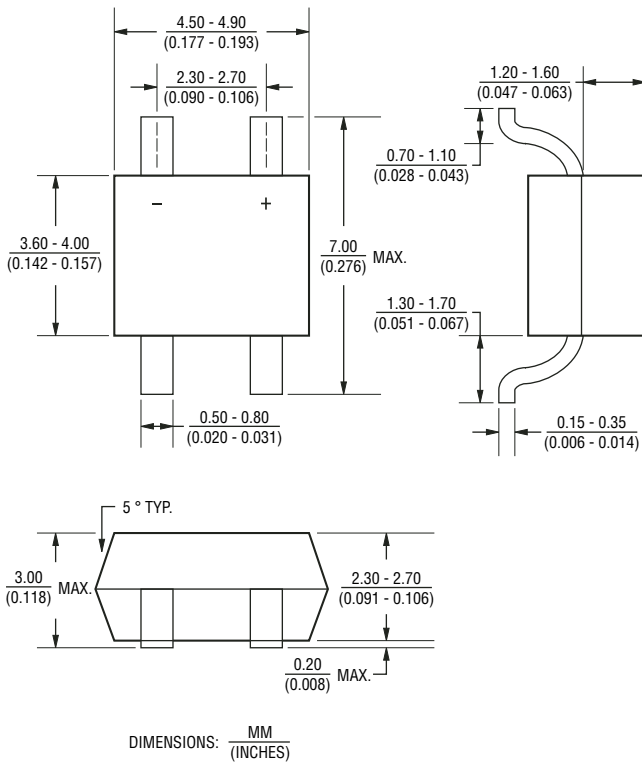
Customers should verify actual device performance in their specific applications.

# CDNBS04-B08200~B08800 Surface Mount Rectifier



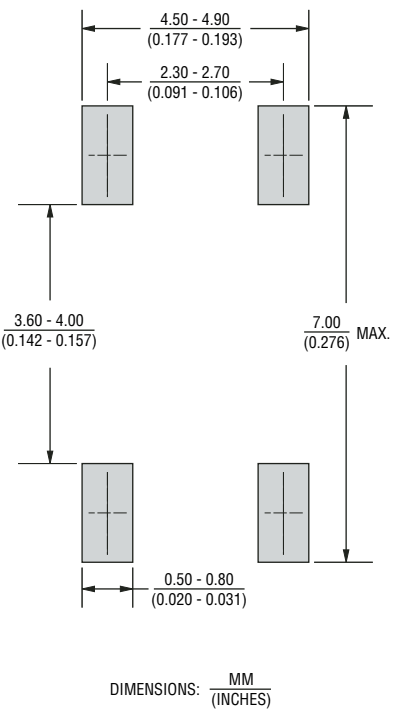
## Product Dimensions

This is a molded package weighs approximately 0.125 g and can be mounted in any position. The dimensions for the packaged device are shown below.



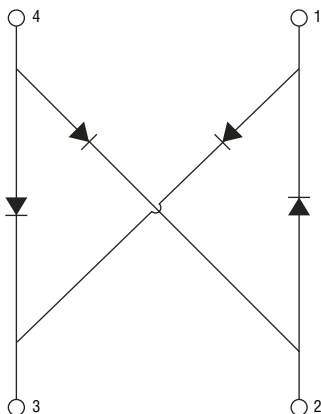
## Recommended Footprint

The device will mount onto existing JEDEC SOD-106 footprint.

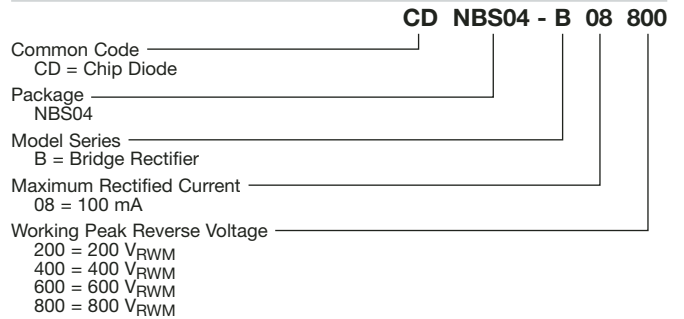


## Block Diagram

The block diagram below includes the pin names and basic electrical connections associated with each channel.



## How To Order



## Typical Part Marking

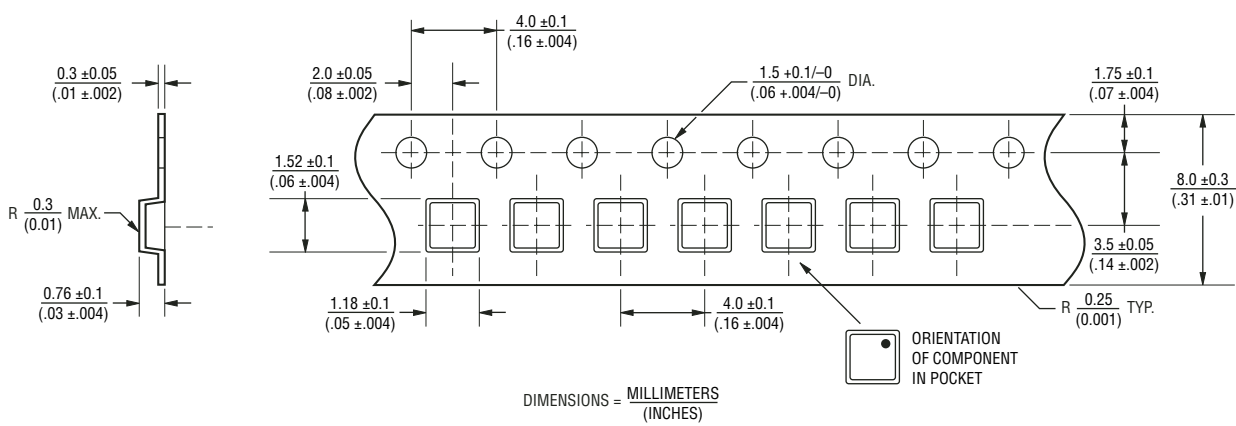
CDNBS04-B08200 .....	<b>B</b> 8 200
CDNBS04-B08400 .....	<b>B</b> 8 400
CDNBS04-B08600 .....	<b>B</b> 8 600
CDNBS04-B08800 .....	<b>B</b> 8 800

# CDNBS04-B08200~B08800 Surface Mount Rectifier

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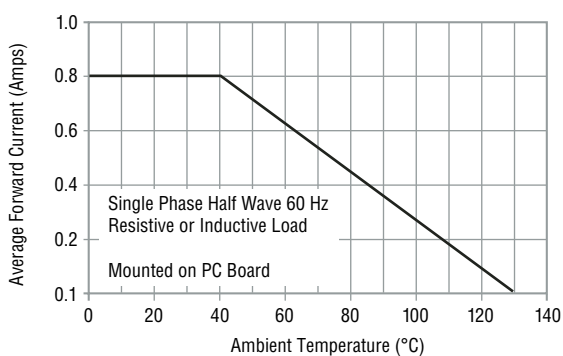
## Packaging Information

The surface mount product is packaged in a 12 mm x 8 mm Tape and Reel format per EIA-481 standard.

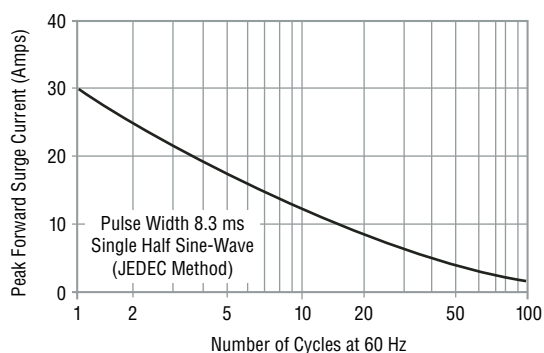


**Performance Graphs**

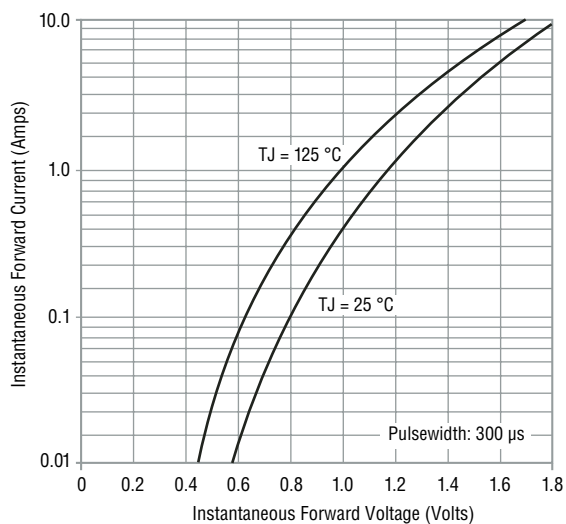
**Forward Current Derating Curve**



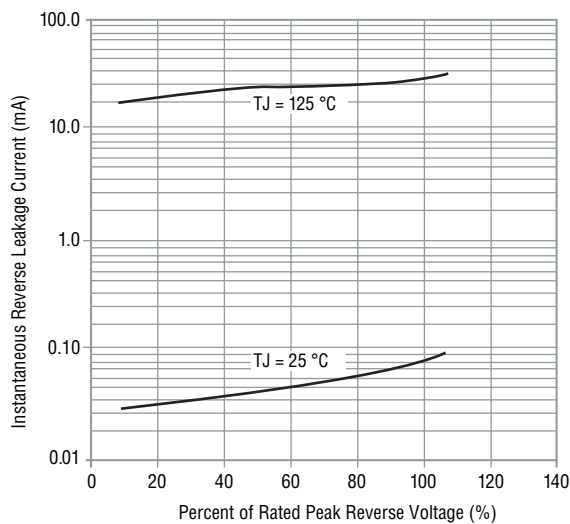
**Maximum Non-Repetitive Surge Current**



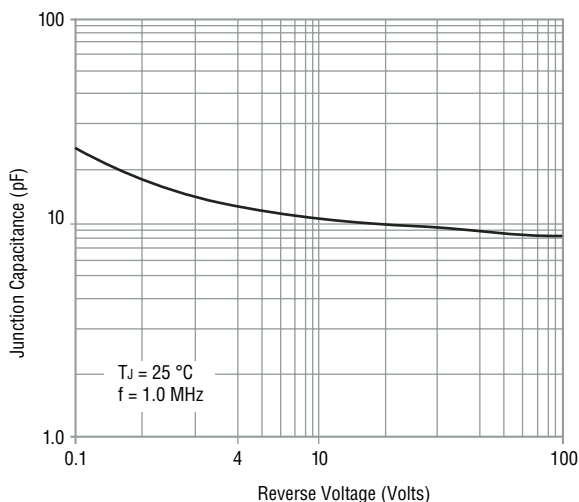
**Typical Forward Characteristics**



**Typical Reverse Characteristics**



**Typical Junction Capacitance**



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