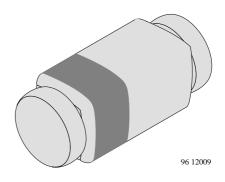


## Vishay Telefunken

# **Switching Diode**

#### Features

• Silicon Epitaxial Planar Diodes



# Applications

General purposes

#### **Order Instruction**

Туре	Type Differentiation	Ordering Code	Remarks
BAV200	V <sub>RRM</sub> = 60 V	BAV200–GS08	Tape and Reel
BAV201	V <sub>RRM</sub> = 120 V	BAV201–GS08	Tape and Reel
BAV202	V <sub>RRM</sub> = 200 V	BAV202–GS08	Tape and Reel
BAV203	V <sub>RRM</sub> = 250 V	BAV203–GS08	Tape and Reel

### **Absolute Maximum Ratings**

 $T_i = 25^{\circ}C$ 

Parameter	Test Conditions	Туре	Symbol	Value	Unit	
Peak reverse voltage		BAV200		60	V	
		BAV201	V	120	V	
		BAV202	V <sub>RRM</sub>	200	V	
		BAV203		250	V	
Reverse voltage		BAV200		50	V	
		BAV201		100	V	
		BAV202	V <sub>R</sub>	150	V	
		BAV203		200	V	
Forward current			۱ <sub>F</sub>	250	mA	
Peak forward surge current	t <sub>p</sub> =1s, T <sub>j</sub> =25 °C		I <sub>FSM</sub>	1	А	
Forward peak current	f=50Hz		I <sub>FM</sub>	625	mA	
Junction temperature			Τ <sub>i</sub>	175	°C	
Storage temperature range			T <sub>stg</sub>	-65+175	°C	

# BAV200...BAV203

### Vishay Telefunken



#### **Maximum Thermal Resistance**

T <sub>i</sub> =	25°C
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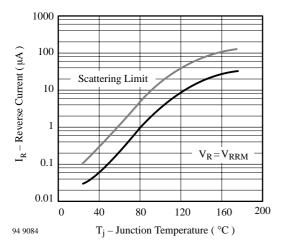
Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	on PC board 50 mmx50 mmx1.6 mm	R <sub>thJA</sub>	500	K/W

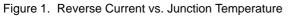
## **Electrical Characteristics**

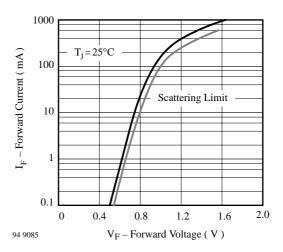
T <sub>i</sub> =	25°C
------------------	------

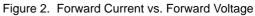
Parameter	Test Conditions	Туре	Symbol	Min	Тур	Max	Unit
Forward voltage	I <sub>F</sub> =100mA		V <sub>F</sub>			1	V
Reverse current	V <sub>R</sub> =50 V	BAV200	I <sub>R</sub>			100	nA
	V <sub>R</sub> =100 V	BAV201	I <sub>R</sub>			100	nA
	V <sub>R</sub> =150 V	BAV202	I <sub>R</sub>			100	nA
	V <sub>R</sub> =200 V	BAV203	I <sub>R</sub>			100	nA
	T <sub>i</sub> =100 °C, V <sub>R</sub> = 50 V	BAV200	I <sub>R</sub>			15	μΑ
	T <sub>i</sub> =100 °C, V <sub>R</sub> = 100 V	BAV201	I <sub>R</sub>			15	μΑ
	T <sub>i</sub> =100 °C, V <sub>R</sub> = 150 V	BAV202	I <sub>R</sub>			15	μΑ
	T <sub>j</sub> =100 °C, V <sub>R</sub> = 200 V	BAV203	I <sub>R</sub>			15	μΑ
Breakdown voltage	I <sub>R</sub> =100μA, t <sub>p</sub> /T=0.01, t <sub>p</sub> =0.3ms	BAV200	V <sub>(BR)</sub>	60			V
		BAV201	V <sub>(BR)</sub>	120			V
		BAV202	V <sub>(BR)</sub>	200			V
		BAV203	V <sub>(BR)</sub>	250			V
Diode capacitance	V <sub>R</sub> =0, f=1MHz		Ĉ <sub>D</sub>		1.5		pF
Differential forward resistance	I <sub>F</sub> =10mA		r <sub>f</sub>		5		Ω
Reverse recovery time	I <sub>F</sub> =I <sub>R</sub> =30mA, i <sub>R</sub> =3mA, R <sub>L</sub> =100Ω		t <sub>rr</sub>			50	ns

# **Characteristics** ( $T_j = 25^{\circ}C$ unless otherwise specified)











# BAV200...BAV203

## Vishay Telefunken

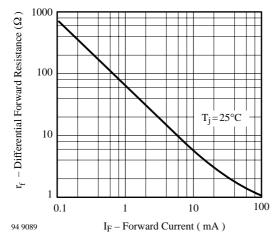
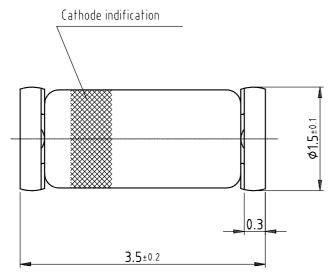


Figure 3. Differential Forward Resistance vs. Forward Current

### **Dimensions in mm**



Glass case Quadro MELF / SOD80 similar to JEDEC 213 AA

96 12071

-R3 Glass



(135<sup>5</sup>)

technical drawings according to DIN specifications

# BAV200...BAV203

#### Vishay Telefunken



### **Ozone Depleting Substances Policy Statement**

It is the policy of Vishay Semiconductor GmbH to

1. Meet all present and future national and international statutory requirements.

2. Regularly and continuously improve the performance of our products, processes, distribution and operating systems with respect to their impact on the health and safety of our employees and the public, as well as their impact on the environment.

It is particular concern to control or eliminate releases of those substances into the atmosphere which are known as ozone depleting substances (ODSs).

The Montreal Protocol (1987) and its London Amendments (1990) intend to severely restrict the use of ODSs and forbid their use within the next ten years. Various national and international initiatives are pressing for an earlier ban on these substances.

Vishay Semiconductor GmbH has been able to use its policy of continuous improvements to eliminate the use of ODSs listed in the following documents.

- 1. Annex A, B and list of transitional substances of the Montreal Protocol and the London Amendments respectively
- 2. Class I and II ozone depleting substances in the Clean Air Act Amendments of 1990 by the Environmental Protection Agency (EPA) in the USA
- 3. Council Decision 88/540/EEC and 91/690/EEC Annex A, B and C (transitional substances) respectively.

Vishay Semiconductor GmbH can certify that our semiconductors are not manufactured with ozone depleting substances and do not contain such substances.

We reserve the right to make changes to improve technical design and may do so without further notice. Parameters can vary in different applications. All operating parameters must be validated for each customer application

by the customer. Should the buyer use Vishay-Telefunken products for any unintended or unauthorized application, the buyer shall indemnify Vishay-Telefunken against all claims, costs, damages, and expenses, arising out of, directly or indirectly, any claim of personal damage, injury or death associated with such unintended or unauthorized use.

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