

### **Vishay Semiconductors**

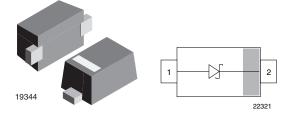
# **Small Signal Schottky Diode**

### **Features**

- This diode features very low turn-on voltage and fast switching
- Space saving SOD-523 package
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC







#### **Mechanical Data**

Case: SOD-523

Weight: approx. 1.4 mg

Molding compound flammability rating:

UL 94 V-0

**Terminals:** high temperature soldering guaranteed:

260 °C/10 s at terminals Packaging codes/options:

08/3K per 7" reel (8 mm tape), 15K/box

### **Parts Table**

Part	Ordering code	Type marking	Remarks	
BAS581-02V-V-G	BAS581-02V-V-G-08	•Z	Tape and reel	

### **Absolute Maximum Ratings**

T<sub>amb</sub> = 25 °C, unless otherwise specified

and .				
Parameter	Test condition	Symbol	Value	Unit
Repetitive peak reverse voltage = working peak reverse voltage		$V_{RRM}$	40	V
Forward continuous current		I <sub>F</sub>	30	mA
Surge forward current		I <sub>FSM</sub>	200	mA

### **Thermal Characteristics**

T<sub>amb</sub> = 25 °C, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit	
Thermal resistance junction to ambient air		$R_{thJA}$	680	K/W	
Junction temperature		T <sub>j</sub>	125	°C	
Storage temperature range		T <sub>stg</sub>	- 65 to + 150	°C	

<sup>\*\*</sup> Please see document "Vishay Material Category Policy": www.vishay.com/doc?99902

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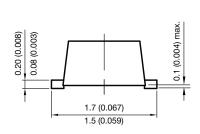


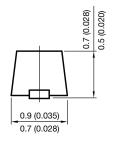
### **Electrical Characteristics**

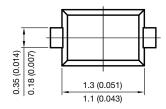
T<sub>amb</sub> = 25 °C, unless otherwise specified

Parameter	Test condition	Symbol	Min.	Тур.	Max.	Unit
Reverse breakdown voltage	$I_r = 100 \mu A$	$V_{(BR)}$	40			V
Leakage current	V <sub>R</sub> = 30 V	I <sub>r</sub>			0.5	μΑ
Forward voltage	I <sub>F</sub> = 1 mA	V <sub>F</sub>			370	mV
Diode capacitance	$V_R = 1 V, f = 1 MHz$	C <sub>D</sub>			2	pF

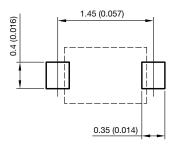
## Package Dimensions in millimeters (inches): SOD-523







foot print recommendation:



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