

## **Vishay Semiconductors**

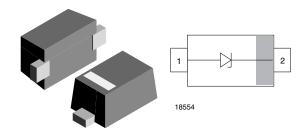
# **Small Signal Schottky Diode**

#### **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

### **Molding Compound Flammability Rating:**

UL 94 V-0

**Terminals:** High temperature soldering guaranteed:

260 °C/10 s at terminals

Weight: approx. 1.6 mg

Packaging Codes/Options:

GS18 / 10 k per 13" reel (8 mm tape), 10 k/box GS08 / 3 k per 7" reel (8 mm tape), 15 k/box

#### **Parts Table**

Part	Ordering code	Marking	Remarks	
BAS581-02V	BAS581-02V-GS18 or BAS581-02V-GS08	Z	Tape and Reel	

### **Absolute Maximum Ratings**

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

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Parameter	Test condition	Symbol	Value	Unit	
Repetitive peak reverse voltage=Working peak reverse voltage		V <sub>RRM</sub>	40	V	
Forward continuous current		I <sub>F</sub>	30	mA	
Surge forward current		I <sub>FSM</sub>	200	mA	

#### **Thermal Characteristics**

 $T_{amb}$  = 25 °C, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit	
Junction soldering point		R <sub>thJS</sub>	100	K/W	
Junction temperature		Tj	125	°C	
Storage temperature range		T <sub>stg</sub>	- 65 to + 150	°C	

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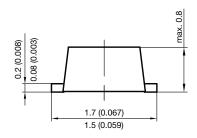


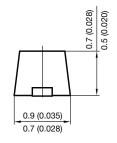
### **Electrical Characteristics**

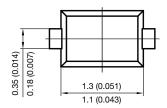
T<sub>amb</sub> = 25 °C, unless otherwise specified

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	l <sub>r</sub>			0.5	μΑ
Forward voltage	I <sub>F</sub> = 1 mA	V <sub>F</sub>			370	mV
Diode capacitance	V <sub>R</sub> = 1 V, f = 1 MHz	C <sub>D</sub>			2	pF

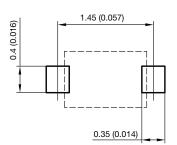
## Package Dimensions in millimeters (inches): SOD-523







foot print recommendation:



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