

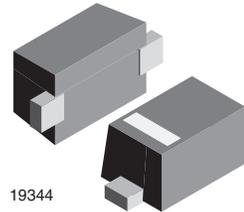
## Small Signal Schottky Diode

### Features

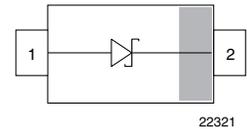
- This diode features very low turn-on voltage and fast switching
- Space saving SOD-523 package
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC



**RoHS**  
COMPLIANT  
**GREEN**  
(5-2008)\*\*



19344



22321

### 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

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

Parameter	Test condition	Symbol	Value	Unit
Repetitive peak reverse voltage = working peak reverse voltage		$V_{RRM}$	40	V
Forward continuous current		$I_F$	30	mA
Surge forward current		$I_{FSM}$	200	mA

### Thermal Characteristics

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

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

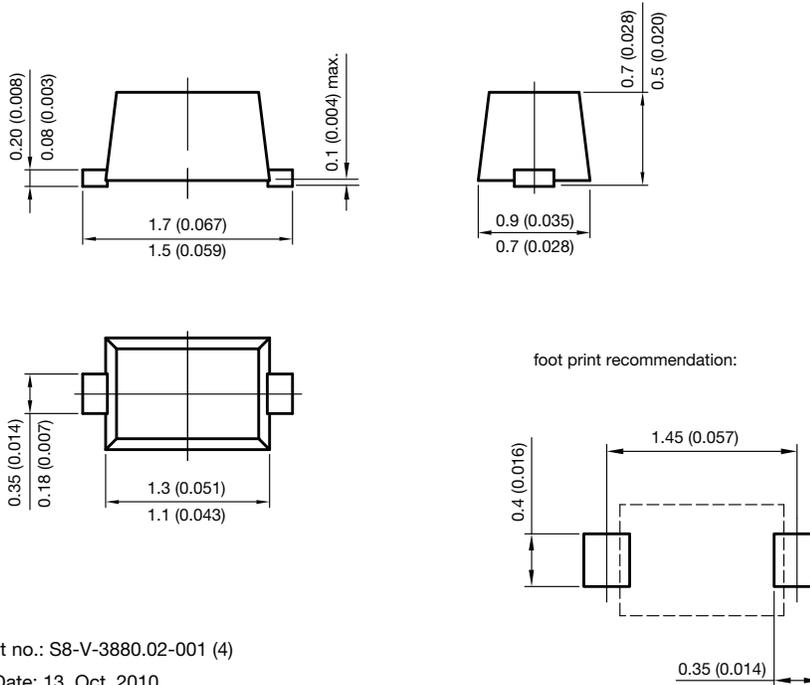
\*\* Please see document "Vishay Material Category Policy": [www.vishay.com/doc?99902](http://www.vishay.com/doc?99902)

## Electrical Characteristics

$T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified

Parameter	Test condition	Symbol	Min.	Typ.	Max.	Unit
Reverse breakdown voltage	$I_r = 100\text{ }\mu\text{A}$	$V_{(BR)}$	40			V
Leakage current	$V_R = 30\text{ V}$	$I_r$			0.5	$\mu\text{A}$
Forward voltage	$I_F = 1\text{ mA}$	$V_F$			370	mV
Diode capacitance	$V_R = 1\text{ V}$ , $f = 1\text{ MHz}$	$C_D$			2	pF

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



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