

Vishay Semiconductors

Rev. 1.0, 14-Oct-10

Document Number 82393

Small Signal Schottky Diode

Features

- This diode features very low turn-on voltage and fast switching
- This device is protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges
- 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	
BAS70-02V-V-G	BAS70-02V-V-G-08	. X	Tape and reel	

Absolute Maximum Ratings

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

Parameter	Test condition	Symbol	Value	Unit
Repetitive peak reverse voltage		V _{RRM}	70	V
Forward continuous current		١ _F	100	mA
Surge forward current		I _{FSM}	600	mA
Power dissipation		P _{tot}	150	mW

Thermal Characteristics

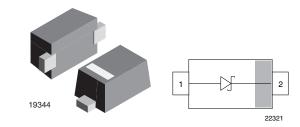
T_{amb} = 25 °C, unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Thermal resistance junction to ambient air		R _{thJA}	680	K/W
Junction temperature		Tj	125	°C
Storage temperature range		T _{stg}	- 55 to +150	°C

For technical questions within your region, please contact one of the following:

DiodesAmericas@vishay.com, DiodesAsia@vishay.com, DiodesEurope@vishay.com

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







RoHS COMPLIANT GREEN (5-2008)**

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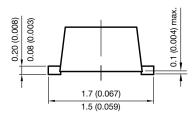


Electrical Characteristics

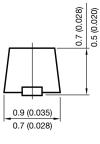
 $T_{amb} = 25 \ ^{\circ}C$, unless otherwise specified

Parameter	Test condition	Symbol	Min.	Тур.	Max.	Unit
Reverse breakdown voltage	I _R = 10 μA (pulsed)	V _(BR)	70			V
Leakage current	$V_{\rm R} = 50$ V, $t_{\rm p} < 300 \ \mu s$	I _R		20	100	nA
Forward voltage	t _p < 300 μs, I _F = 1.0 mA	V _F			410	mV
	t _p < 300 μs, I _F = 15 mA	V _F			1000	mV
Diode capacitance	V _R = 0 V, f = 1 MHz	CD		1.5	2	pF
Reverse recovery time	$I_{F} = 10 \text{ mA}, I_{R} = 10 \text{ mA},$ $I_{rr} = 1 \text{ mA}, R_{L} = 100 \Omega$	t _{rr}			5	ns

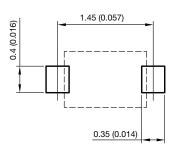
Package Dimensions in millimeters (inches): SOD-523



1.3 (0.051) 1.1 (0.043)



foot print recommendation:



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0.35 (0.014) 0.18 (0.007)



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