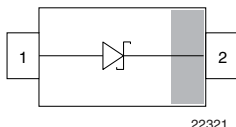


Small Signal Schottky Diode



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
- Material categorization:
For definitions of compliance please see www.vishay.com/doc?99912



RoHS
COMPLIANT
GREEN
(5-2008)

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	INTERNAL CONSTRUCTION	TYPE MARKING	REMARKS
BAS40-02V-V-G	BAS40-02V-V-G-08	Single diode	.W	Tape and reel

ABSOLUTE MAXIMUM RATINGS (T_{amb} = 25 °C, unless otherwise specified)

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Repetitive peak reverse voltage		V _{RRM}	40	V
Forward continuous current		I _F	120	mA
Surge forward current		I _{FSM}	600	mA
Power dissipation		P _{tot}	150	mW

THERMAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)

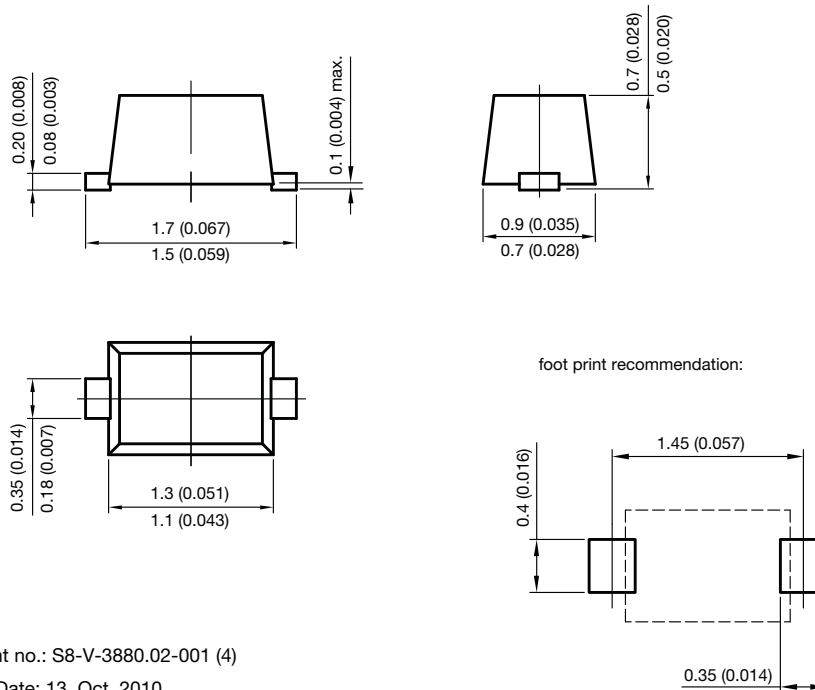
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Thermal resistance junction to ambient air		R _{thJA}	680	K/W
Junction temperature		T _j	125	°C
Storage temperature range		T _{stg}	- 55 to + 150	°C

ELECTRICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)

PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Reverse breakdown voltage	I _R = 10 µA (pulsed)	V _(BR)	40			V
Leakage current	Pulse test V _R = 30 V, t _p < 300 µs	I _R		20	100	nA
Forward voltage	Pulse test t _p < 300 µs, I _F = 1 mA	V _F			380	mV
	Pulse test t _p < 300 µs, I _F = 40 mA	V _F			1000	mV
Diode capacitance	V _R = 0 V, f = 1 MHz	C _D		4	5	pF
Reverse recovery time	I _F = 10 mA, I _R = 10 mA, I _{rr} = 1 mA, R _L = 100 Ω	t _{rr}			5	ns



PACKAGE DIMENSIONS in millimeters (inches): **SOD-523**



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