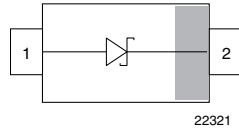


## Small Signal Schottky Diode



### FEATURES

- This diode features very low turn-on voltage and fast switching
- Space saving SOD-523 package
- Material categorization:  
For definitions of compliance please see [www.vishay.com/doc?99912](http://www.vishay.com/doc?99912)



**DESIGN SUPPORT TOOLS** click logo to get started



### 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	CIRCUIT CONFIGURATION	TYPE MARKING	REMARKS
BAS581-02V-V-G	BAS581-02V-V-G-08	Single	.Z	Tape and reel

### ABSOLUTE MAXIMUM RATINGS ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified)

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Repetitive peak reserve voltage = working peak reserve voltage		$V_{RRM}$	40	V
Forward continuous current		$I_F$	30	mA
Surge forward current		$I_{FSM}$	200	mA

### THERMAL CHARACTERISTICS ( $T_{amb} = 25\text{ }^{\circ}\text{C}$ , unless otherwise specified)

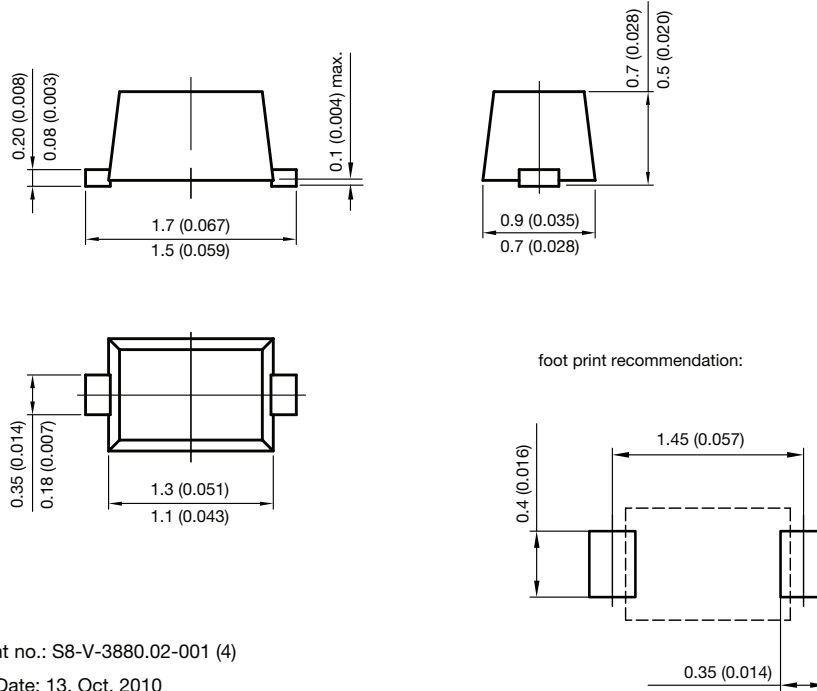
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Thermal resistance junction to ambient air		$R_{thJA}$	680	K/W
Junction temperature		$T_J$	125	$^{\circ}\text{C}$
Storage temperature range		$T_{stg}$	-65 to +150	$^{\circ}\text{C}$

### 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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