

Vishay Semiconductors

Small Signal Schottky Diode



MECHANICAL DATA

Case: SOD-323

Weight: approx. 4.0 mg Packaging codes/options:

18/10K per 13" reel (8 mm tape), 10K/box 08/3K per 7" reel (8 mm tape), 15K/box

FEATURES

- Schottky diode for high-speed switching
- · Circuit protection
- Voltage clamping
- · High-level detecting and mixing
- AEC-Q101 qualified
- Base P/N-G3 green, commercial grade
- Material categorization: For definitions of compliance please see

www.vishay.com/doc?99912







(5-2008)

PARTS TABLE					
PART ORDERING CODE		INTERNAL CONSTRUCTION	TYPE MARKING	REMARKS	
BAS170WS-G	BAS170WS-G3-08 or BAS170WS-G3-18	Single diode	7G	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}	70	V	
Forward continuous current		I _F	70	mA	
Surge forward current	t _p < 1 s	I _{FSM}	600	mA	
Power dissipation (1)		P _{tot}	200	mW	

Note

⁽¹⁾ Valid provided that electrodes are kept at ambient temperature

THERMAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified)					
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT	
Thermal resistance junction to ambient air (1)		R _{thJA}	650	K/W	
Junction temperature		Tj	125	°C	
Operating temperature range		T _{op}	- 55 to + 125	°C	
Storage temperature range		T _{stg}	- 65 to + 150	°C	

Note

⁽¹⁾ Valid provided that electrodes are kept at ambient temperature

ELECTRICAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Reverse breakdown voltage	$I_R = 10 \mu A \text{ (pulsed)}$	V _(BR)	70			V
Lookogo ouwront	V _R = 50 V	I _R			0.1	μA
Leakage current	V _R = 70 V	I _R			10	μA
Forward voltage	I _F = 1 mA	V _F		375	410	mV
Forward voltage	I _F = 10 mA	V _F		705	750	mV
Forward voltage (1)	I _F = 15 mA	V _F		880	1000	mV
Diode capacitance	$V_R = 0 V$, $f = 1 MHz$	C _D		1.5	2	pF
Differential forward resistance	$I_F = 5 \text{ mA}, f = 10 \text{ kHz}$	r _f		34		Ω

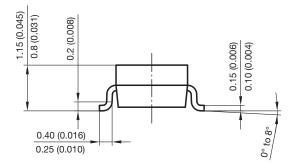
Note

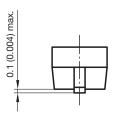
⁽¹⁾ Pulse test; $t_p \le 300 \ \mu s$

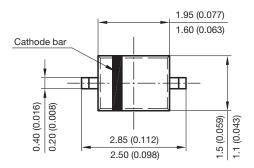


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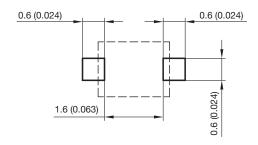
PACKAGE DIMENSIONS in millimeters (inches): SOD-323







Foot print recommendation:



Document no.:S8-V-3910.02-001 (4) Created - Date: 24.August.2004 Rev. 5 - Date: 23.Sept.2009



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Revision: 02-Oct-12 Document Number: 91000



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- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



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