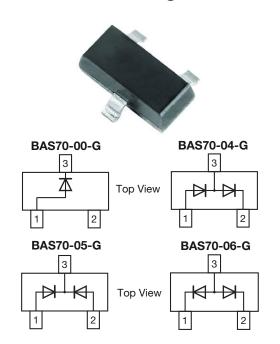


www.vishay.com

Vishay Semiconductors

Small Signal Schottky Diodes, Single and Dual



FEATURES

- These diodes feature very low turn-on voltage and fast switching
- These devices are protected by a PN junction guard ring against excessive voltage, such as electrostatic discharges
- AEC-Q101 qualified available (part number on request)
- Base P/N-G3 green, commercial grade
- Material categorization: for definitions of compliance please see www.vishav.com/doc?99912





ROHS COMPLIANT HALOGEN FREE

GREEN (5-2008)

MECHANICAL DATA

Case: SOT-23

Weight: approx. 8.1 mg
Packaging codes/options:

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

DESIGN SUPPORT TOOLS click logo to get started



PARTS TABLE					
PART	ORDERING CODE	CIRCUIT CONFIGURATION	TYPE MARKING	REMARKS	
BAS70-00-G	BAS70-00-G3-08 or BAS70-00-G3-18	Single	73G	Tape and reel	
BAS70-04-G	BAS70-04-G3-08 or BAS70-04-G3-18	Dual serial	74G	Tape and reel	
BAS70-05-G	BAS70-05-G3-08 or BAS70-05-G3-18	Common cathode	75G	Tape and reel	
BAS70-06-G	BAS70-06-G3-08 or BAS70-06-G3-18	Common anode	76G	Tape and reel	

ABSOLUTE MAXIMUM RATINGS (T _{amb} = 25 °C, unless otherwise specified)					
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT	
Repetitive peak reverse voltage		$V_{RRM} = V_{RRM} = V_{R}$	70	V	
Forward continuous current (1)		I _F	200	mA	
Surge forward current (1)	t _p < 1 s	I _{FSM}	600	mA	
Power dissipation (1)		P _{tot}	200	mW	

Note

⁽¹⁾ Device on fiberglass substrate, see layout on next page

THERMAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified)					
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT	
Thermal resistance junction to ambient air (1)		R _{thJA}	500	K/W	
Junction temperature		Tj	125	°C	
Storage temperature range		T _{stg}	-65 to +150	°C	
Operating temperature range		Ton	-55 to +125	°C	

Note

⁽¹⁾ Device on fiberglass substrate, see layout on next page



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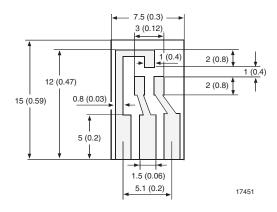
ELECTRICAL CHARACTERISTICS (T _{amb} = 25 °C, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Reserve breakdown voltage	$I_R = 10 \mu A \text{ (pulsed)}$	V _(BR)	70			V
Leakage current	V _R = 50 V	I _R		20	100	nA
Forward voltage	I _F = 1.0 mA	V _F			410	mV
Forward voltage (1)	I _F = 15 mA	V _F			1000	mV
Diode capacitance	V _R = 0 V, f = 1 MHz	C _D		1.5	2	pF
Reserve recovery time	$I_F = I_R = 10$ mA, $i_R = 1$ mA, $R_L = 100 \Omega$	t _{rr}			5	ns

Note

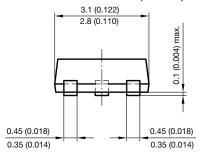
LAYOUT FOR R_{thJA} TEST

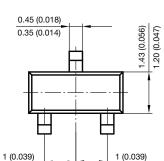
Thickness:

Fiberglass 1.5 mm (0.059") Copper leads 0.3 mm (0.012")



PACKAGE DIMENSIONS in millimeters (inches): SOT-23

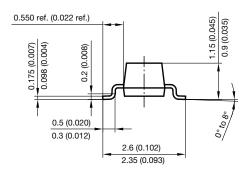


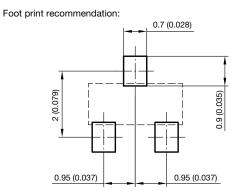


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Document no.: 6.541-5014.01-4 Rev. 8 - Date: 23.Sept.2009

0.9 (0.035)





⁽¹⁾ Pulse test; $t_p \le 300 \ \mu s$



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