



WILLAS

RoHS
COMPLIANT

200mA Surface Mount Switching Diode-200V
SOD-323 Package
BAS20H

High Voltage Switching Diode

- We declare that the material of product compliance with RoHS requirements.

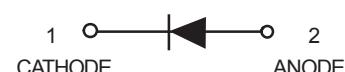
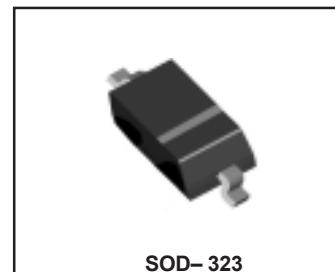
Pb-Free package is available

RoHS product for packing code suffix "G"

Halogen free product for packing code suffix "H"

- Moisture Sensitivity Level 1**

- Polarity:** Color band denotes cathode end



Ordering Information

Device	Marking	Shipping
BAS20H	JR	3000/Tape&Reel

MAXIMUM RATINGS

Rating	Symbol	Value	Unit
Continuous Reverse Voltage	V _R	200	Vdc
Peak Forward Current	I _F	200	mAdc
Peak Forward Surge Current	I _{FM(surge)}	625	mAdc

THERMAL CHARACTERISTICS

Characteristic	Symbol	Max	Unit
Total Device Dissipation FR-5 Board,* $T_A = 25^\circ\text{C}$	P _D	200	mW
Derate above 25°C		1.57	mW/ $^\circ\text{C}$
Thermal Resistance Junction to Ambient	R _{θJA}	635	$^\circ\text{C}/\text{W}$
U _J * Junction and Storage Temperature Range	T _J , T _{sg}	-55 to +150	$^\circ\text{C}$

*FR-5 Minimum Pad

ELECTRICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ unless otherwise noted)

Characteristic	Symbol	Min	Max	Unit
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OFF CHARACTERISTICS

Reverse Voltage Leakage Current ($V_R = 200$ Vdc) ($V_R = 200$ Vdc, $T_J = 150^\circ\text{C}$)	I _R	—	1.0	μAdc
—	—	—	100	
Reverse Breakdown Voltage ($I_{BR} = 100 \mu\text{Adc}$)	V _(BR)	200	—	Vdc
Forward Voltage ($I_F = 100$ mAdc) ($I_F = 200$ mAdc)	V _F	—	1000	mV
—	—	—	1250	
Diode Capacitance ($V_R = 0$, $f = 1.0$ MHz)	C _D	—	5.0	pF
Reverse Recovery Time ($I_F = I_R = 30$ mAdc, $R_L = 100 \Omega$)	t _{rr}	—	50	ns

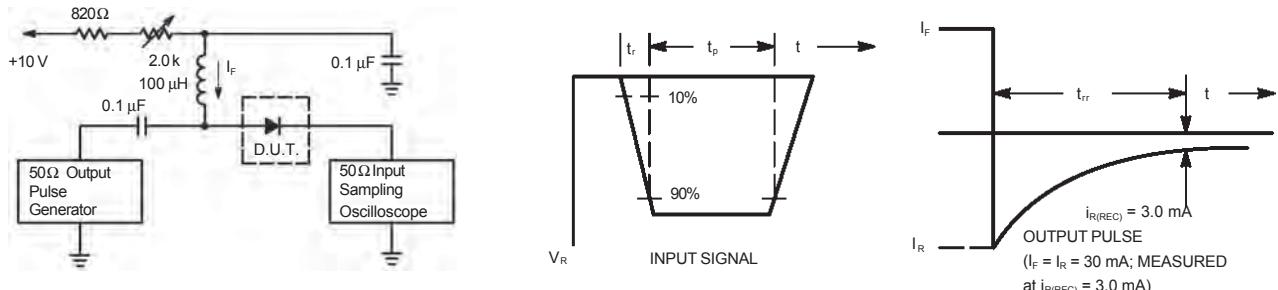


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- Notes:**
1. A 2.0 kΩ variable resistor adjusted for a Forward Current (I_F) of 30 mA.
 2. Input pulse is adjusted so $I_{R(\text{peak})}$ is equal to 30 mA.
 3. $t_p \gg t_{ff}$

Figure 1. Recovery Time Equivalent Test Circuit

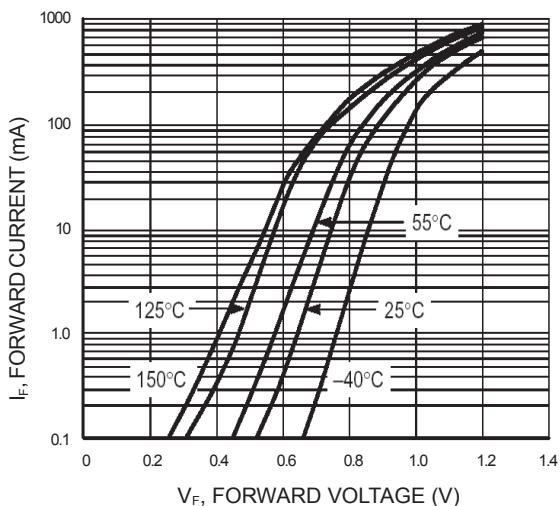


Figure 2. Forward Current

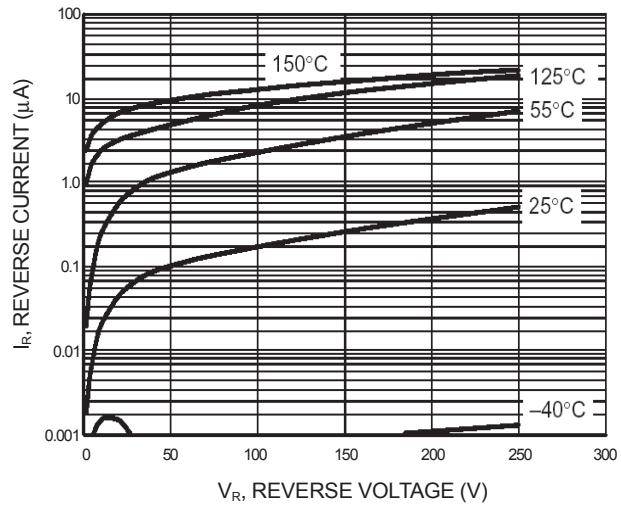


Figure 3. Leakage Current

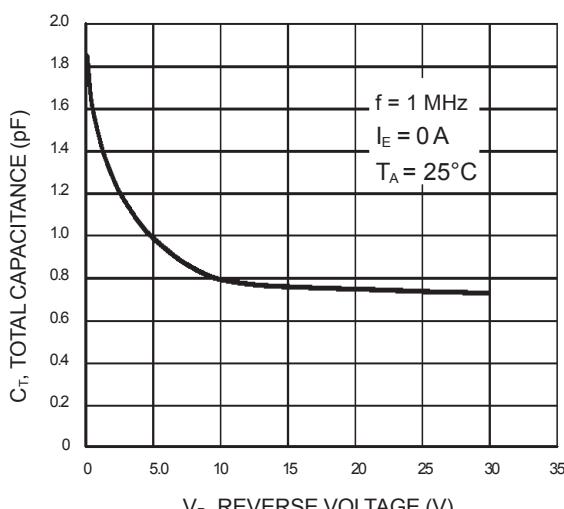


Figure 4. Total Capacitance

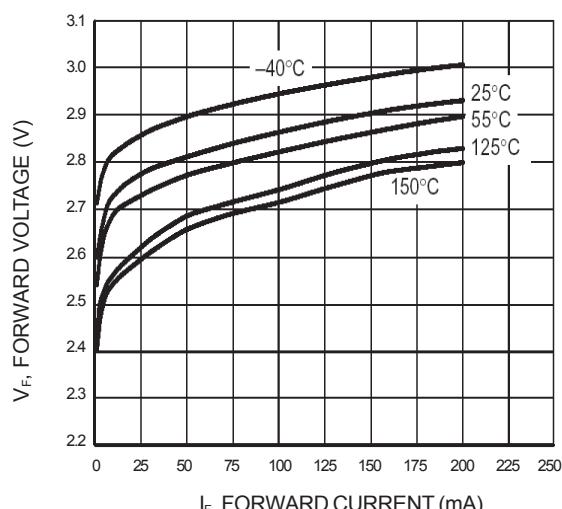


Figure 5. Forward Voltage



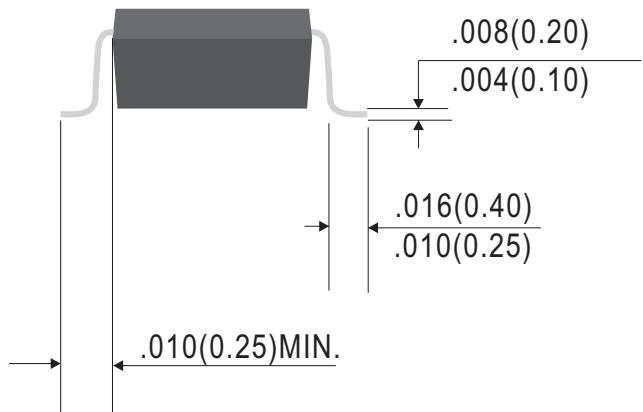
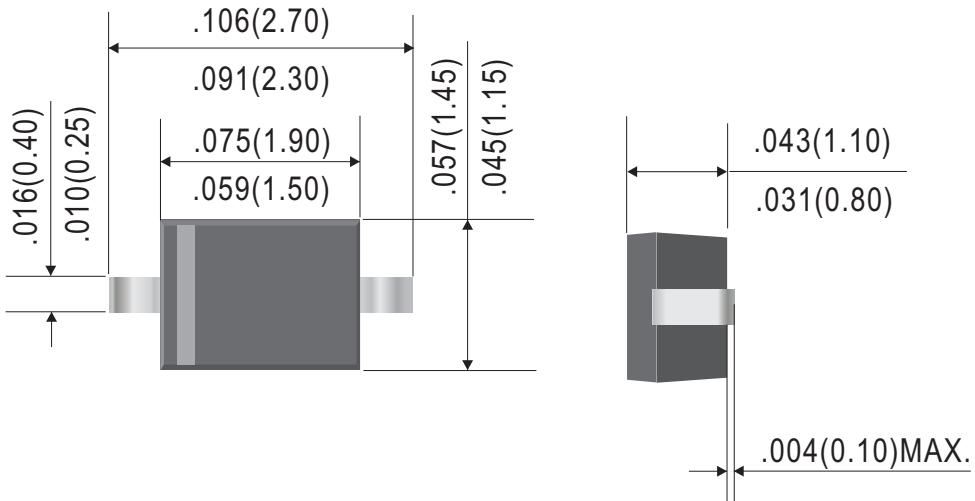
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Dimensions in inches and (millimeters)



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Ordering Information:

Device PN	Packing
BAS20H-T ⁽¹⁾ G ⁽²⁾ -WS	Tape&Reel: 3 Kpcs/Reel

Note: (1) Packing code, Tape&Reel Packing

(2) RoHS product for packing code suffix "G" ; Halogen free product for packing code suffix "H"

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