

BAV19WS, BAV20WS, BAV21WS

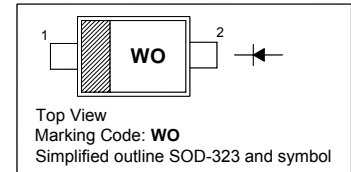
SURFACE MOUNT FAST SWITCHING DIODE

Features

- Fast Switching Speed
- Surface Mount Package Ideally Suited for automatic Insertion
- For General Purpose Switching Applications
- High Conductance

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

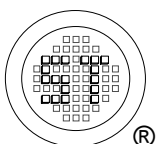


Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit	
Repetitive Peak Reverse Voltage	BAV19WS	120	V	
	BAV20WS	200		
	BAV21WS	250		
Reverse Voltage	BAV19WS	100	V	
	BAV20WS	150		
	BAV21WS	200		
Average Rectified Output Current	I_O	200	mA	
Forward Continuous Current	I_{FM}	400	mA	
Repetitive Peak Forward Current	I_{FRM}	625	mA	
Non-repetitive Peak Forward Surge Current	at $t = 1\text{ }\mu\text{s}$ at $t = 1\text{ s}$	I_{FSM}	2.5	A
			0.5	
Power Dissipation	P_{tot}	200	mW	
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 150	$^\circ\text{C}$	

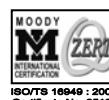
Characteristics at $T_a = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$	BAV19WS	120	-	V
	BAV20WS	200	-	
	BAV21WS	250	-	
Reverse Current at $V_R = 100\text{ V}$ at $V_R = 150\text{ V}$ at $V_R = 200\text{ V}$	BAV19WS	-	100	nA
	BAV20WS	-	100	
	BAV21WS	-	100	
Forward Voltage at $I_F = 100\text{ mA}$ at $I_F = 200\text{ mA}$	V_F	-	1	V
		-	1.25	
Total Capacitance at $f = 1\text{ MHz}$	C_T	-	5	pF
Reverse Recovery Time at $I_F = I_R = 30\text{ mA}$, $I_{RR} = 0.1 \times I_R$, $R_L = 100\text{ }\Omega$	t_{rr}	-	50	ns



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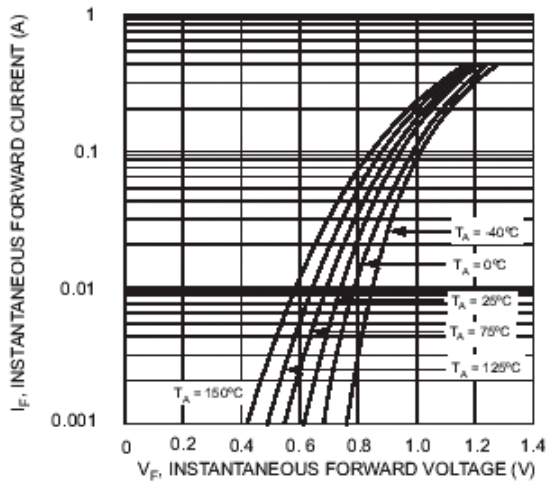


Fig. 1 Typical Forward Characteristics

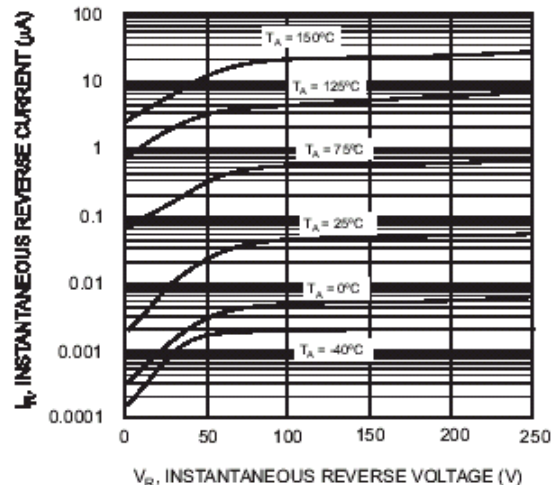


Fig. 2 Typical Reverse Characteristics

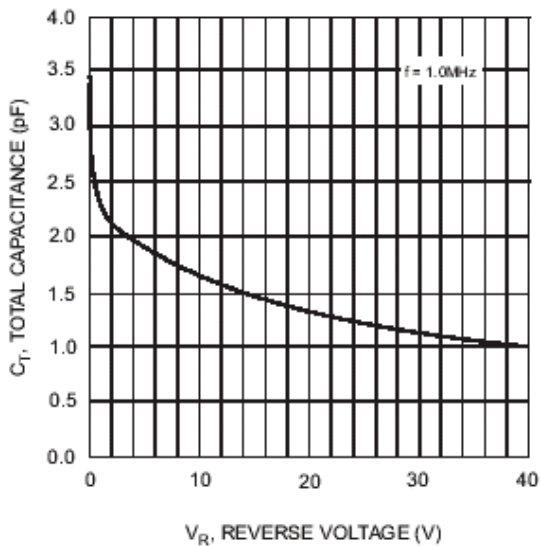


Fig. 3 Typical Capacitance vs. Reverse Voltage

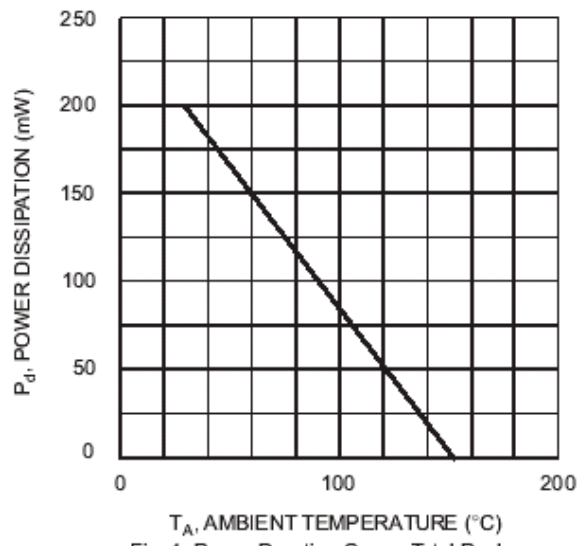
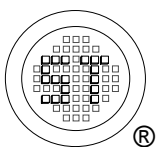
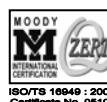


Fig. 4 Power Derating Curve, Total Package



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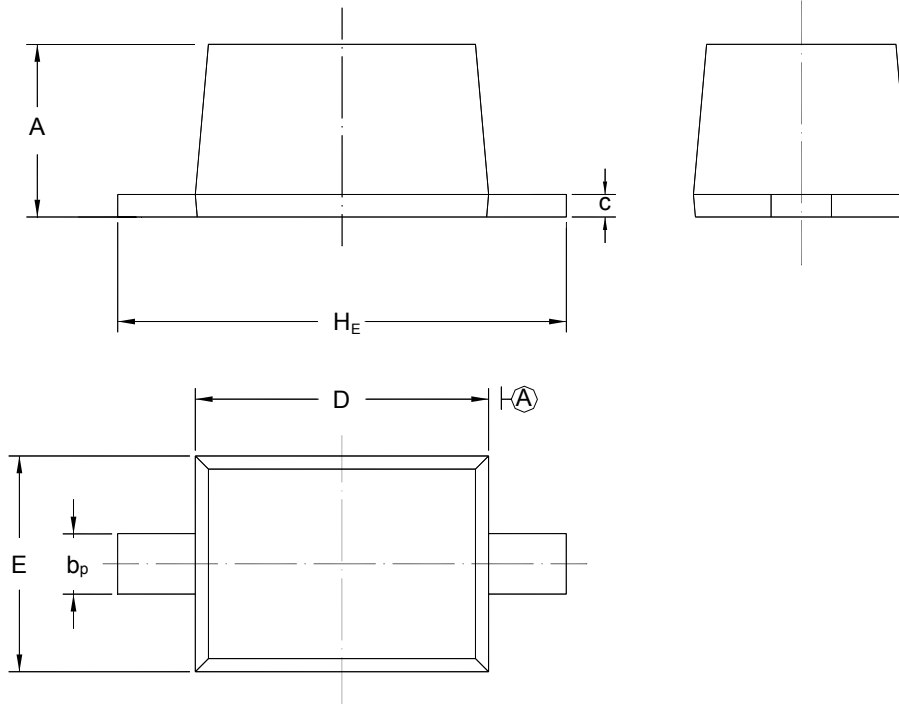
IECQ QC 080000
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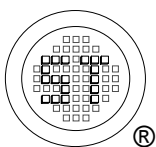
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

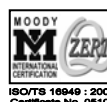
SOD-323



UNIT	A	b _p	C	D	E	H _E
mm	1.10 0.80	0.40 0.25	0.15 0.00	1.80 1.60	1.35 1.15	2.80 2.30



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