

BAV116W

Silicon Epitaxial Planar Low Leakage Diode

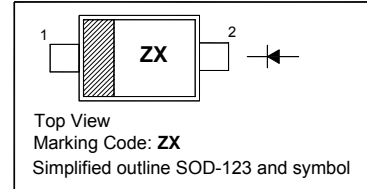
For low leakage current applications

Feature

- Very low leakage current
- Medium speed switching times

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

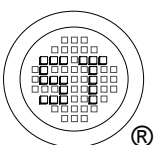


Absolute Maximum Ratings ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	V_{RRM}	110	V
Continuous Forward Current	I_{FM}	215	mA
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	4 1 0.5	A
		at $t = 1 \mu\text{s}$ at $t = 1 \text{ms}$ at $t = 1 \text{s}$	
Power Dissipation	P_D	250	mW
Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	500	$^\circ\text{C/W}$
Operating and Storage Temperature Range	T_j, T_{stg}	- 65 to + 150	$^\circ\text{C}$

Electrical Characteristics ($T_a = 25^\circ\text{C}$)

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 100 \mu\text{A}$	$V_{(BR)R}$	110	-	V
Forward Voltage at $I_F = 1 \text{mA}$ at $I_F = 10 \text{mA}$ at $I_F = 50 \text{mA}$ at $I_F = 150 \text{mA}$	V_F	- - - -	0.9 1 1.1 1.25	V
Reverse Current at $V_R = 75 \text{V}$ at $V_R = 75 \text{V}, T_j = 125^\circ\text{C}$	I_R	- -	5 80	nA
Total Capacitance at $V_R = 0, f = 1 \text{MHz}$	C_T	-	5	pF
Reverse Recovery Time at $I_F = I_R = 10 \text{mA}, I_{rr} = 0.1 \times I_R, R_L = 100 \Omega$	t_{rr}	-	3	μs



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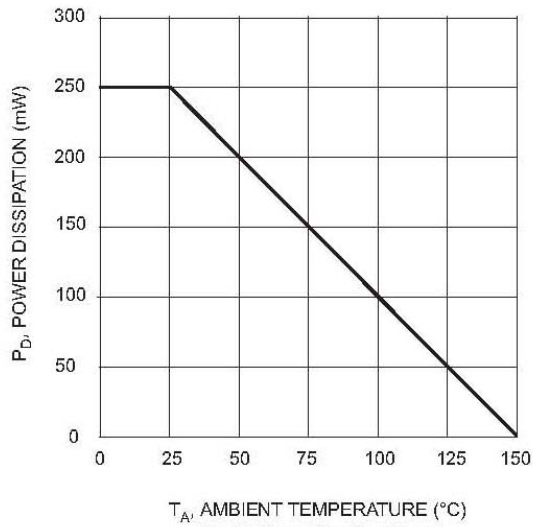


Fig. 1 Power Derating Curve

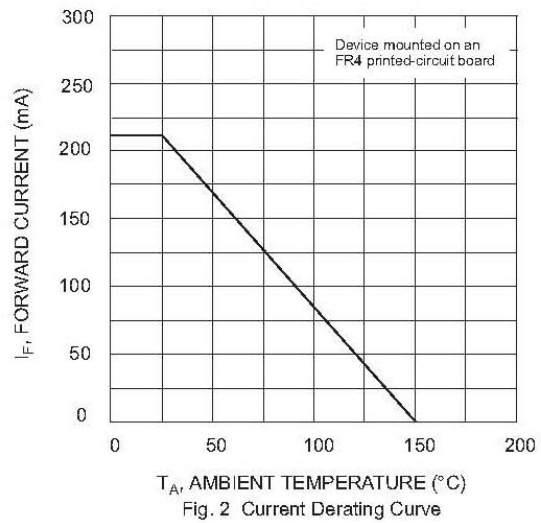


Fig. 2 Current Derating Curve

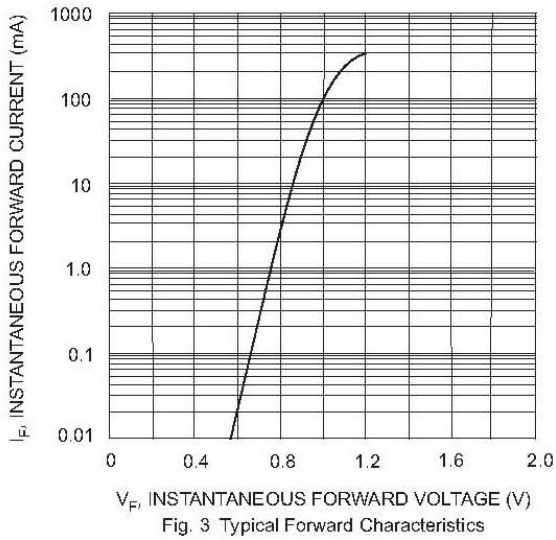


Fig. 3 Typical Forward Characteristics

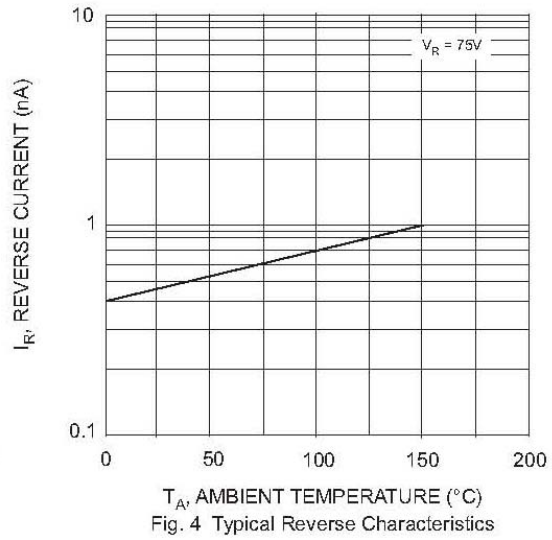
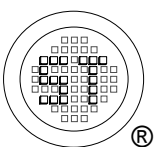


Fig. 4 Typical Reverse Characteristics



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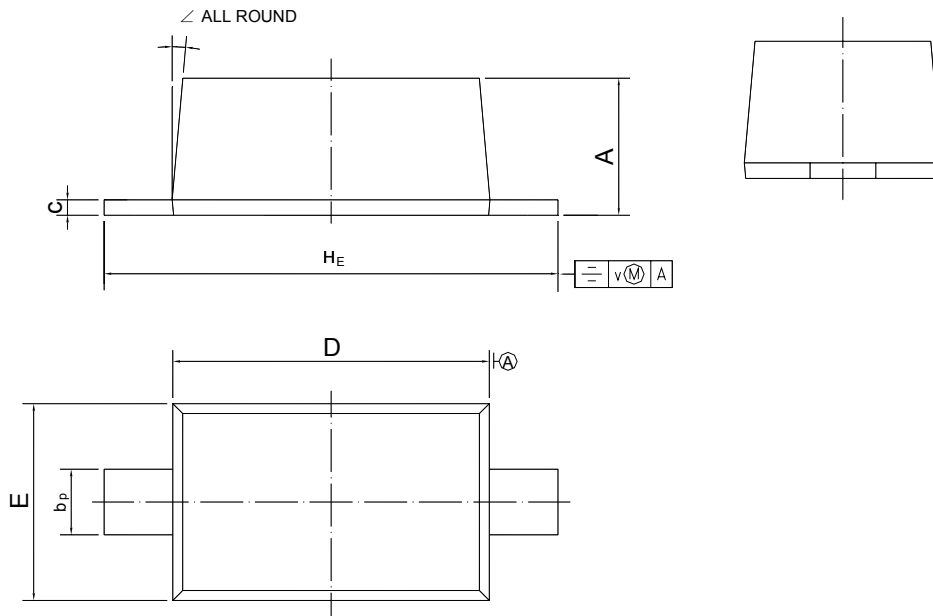


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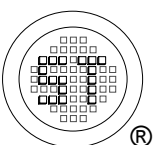
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	b _p	c	D	E	H _E	v	∠
mm	1.15 1.05	0.6 0.5	0.135 0.100	2.7 2.6	1.65 1.55	3.85 3.55	0.2	5°



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