

BAV116WS

Silicon Epitaxial Planar Low Leakage Diode

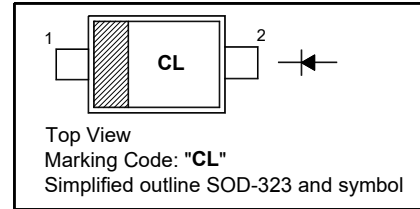
For low leakage current applications

Feature

- Very low leakage current
- Medium speed switching times

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings (T_a = 25°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
Power Dissipation	P _D	200	mW
Operating and Storage Temperature Range	T _j , T _{stg}	- 65 to + 150	°C

Thermal Characteristics

Parameter	Symbol	Max.	Unit
Thermal Resistance from Junction to Ambient ¹⁾	R _{θJA}	625	°C/W

¹⁾ Device mounted on FR-4 substrate PC board, 2oz copper, with minimum recommended pad layout.

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Electrical Characteristics (T_a = 25°C)

Parameter	Symbol	Min.	Max.	Unit
Reverse Breakdown Voltage at I _R = 100 μA	V _{(BR)R}	110	-	V
Forward Voltage at I _F = 1 mA at I _F = 10 mA at I _F = 50 mA at I _F = 150 mA	V _F	- - - -	0.9 1 1.1 1.25	V
Reverse Current at V _R = 75 V at V _R = 75 V, T _j = 125°C	I _R	- -	5 80	nA
Total Capacitance at V _R = 0, f = 1 MHz	C _T	-	5	pF
Reverse Recovery Time at I _F = I _R = 10 mA, I _{rr} = 0.1 X I _R , R _L = 100 Ω	t _{rr}	-	3	μs

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Electrical Characteristic Curve

Fig 1. Power Derating Curve

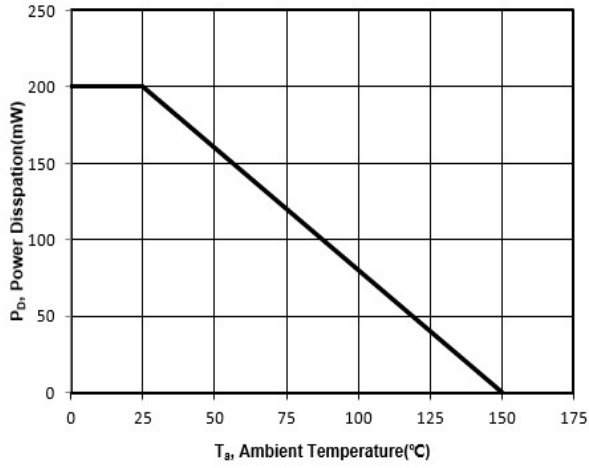


Fig 2. Forward Current Derating

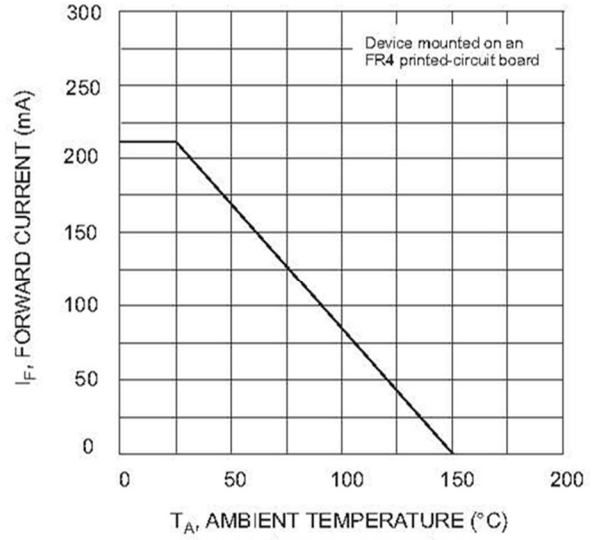


Fig 3. Forward Characteristics

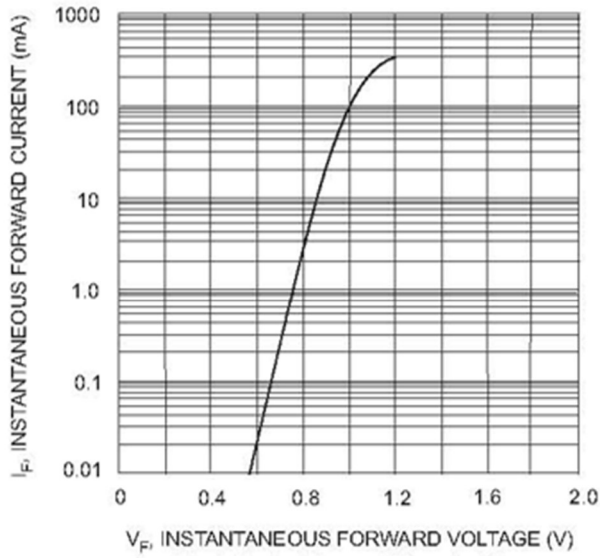
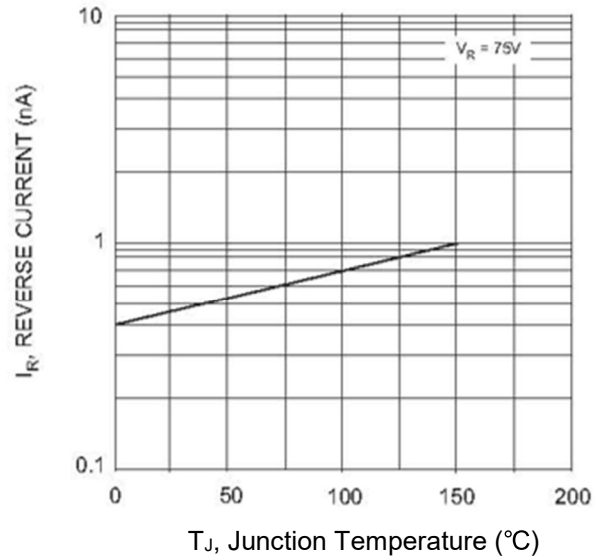


Fig 4. Reverse Characteristics

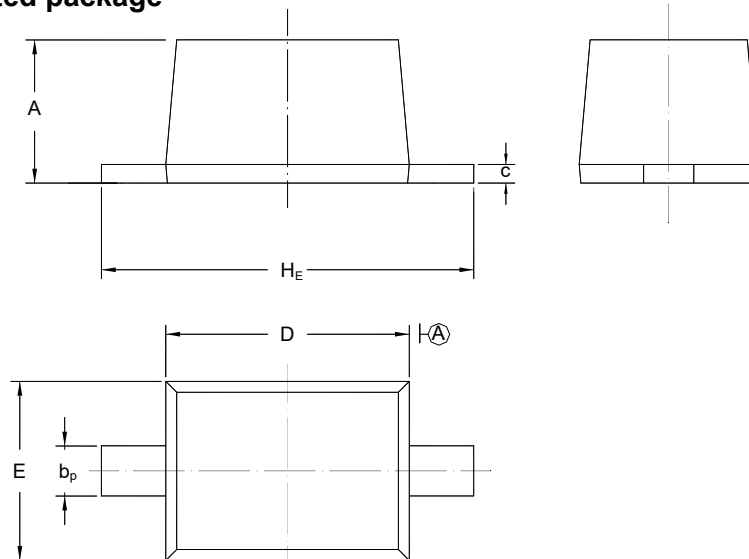


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PACKAGE OUTLINE

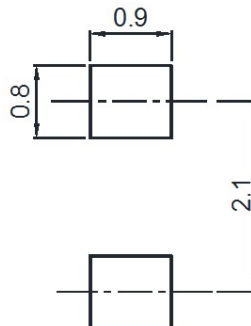
SOD-323

Plastic surface mounted package



UNIT	A	b _p	C	D	E	H _E
mm	1.10 0.80	0.40 0.25	0.15 0.10	1.80 1.60	1.35 1.15	2.80 2.30

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	inch	mm	inch	
SOD-323	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

Marking information

" III " = Cathode line

" CL " = Part No.

Font type: Arial

