

SD103AW...SD103CW-AH

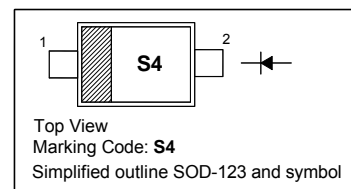
Surface Mount Schottky Barrier Diodes

Features

- Low Forward Voltage
- AEC-Q101 Qualified and PPAP Capable
- Halogen and Antimony Free(HAF), RoHS compliant

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

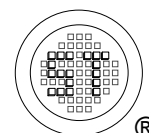


Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit	
Peak Repetitive Reverse Voltage	SD103AW SD103BW SD103CW	V_{RRM}	40 30 20	V
Reverse Voltage	SD103AW SD103BW SD103CW	V_R	40 30 20	V
Average Forward Rectified Current		$I_{F(AV)}$	350	mA
Non-Repetitive Peak Forward Surge Current at $t = 1\text{ s}$		I_{FSM}	2	A
Power Dissipation		P_{tot}	400	mW
Operating and Storage Temperature Range		T_j, T_{stg}	- 65 to + 125	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Typ.	Max.	Unit
Reverse Breakdown Voltage at $I_R = 10\text{ }\mu\text{A}$	SD103AW SD103BW SD103CW	$V_{(BR)R}$	40 30 20	- - -	V
Reverse Leakage Current at $V_R = 30\text{ V}$ at $V_R = 20\text{ V}$ at $V_R = 10\text{ V}$	SD103AW SD103BW SD103CW	I_R	- - -	5 5 5	μA
Forward Voltage at $I_F = 20\text{ mA}$ at $I_F = 200\text{ mA}$		V_F	- -	0.37 0.6	V
Total Capacitance at $V_R = 0\text{ V}$, $f = 1\text{ MHz}$		C_T	-	50	pF
Reverse Recovery Time at $I_F = I_R = 200\text{ mA}$, $I_{rr} = 0.1 I_R$, $R_L = 100\text{ }\Omega$		t_{rr}	-	10	ns



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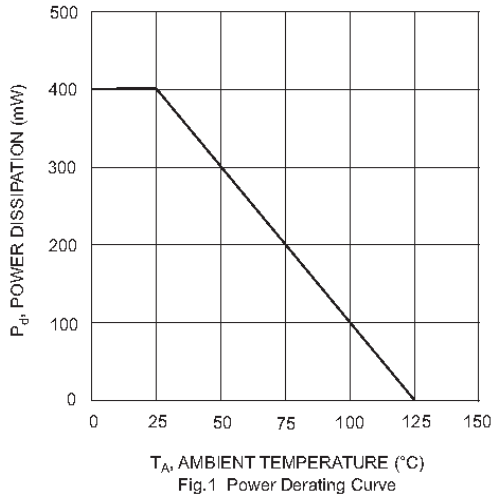


Fig. 1 Power Derating Curve

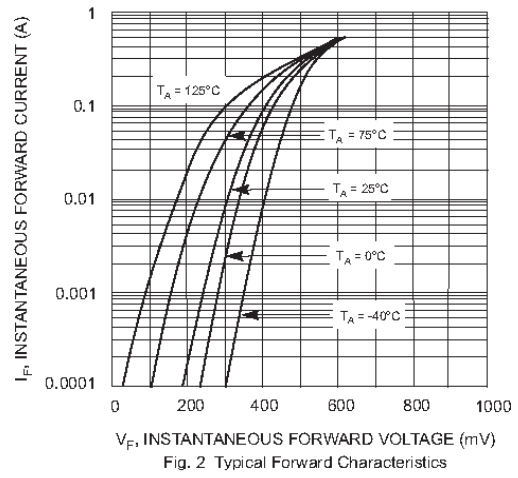


Fig. 2 Typical Forward Characteristics

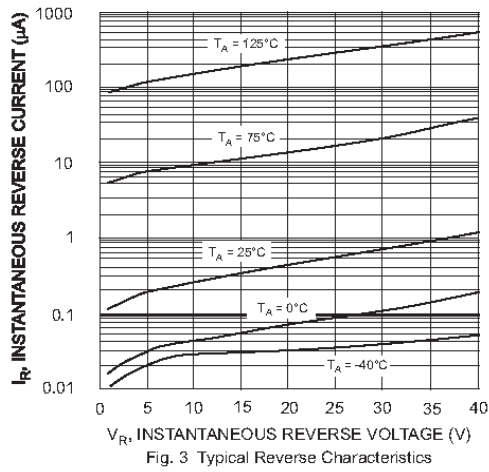


Fig. 3 Typical Reverse Characteristics

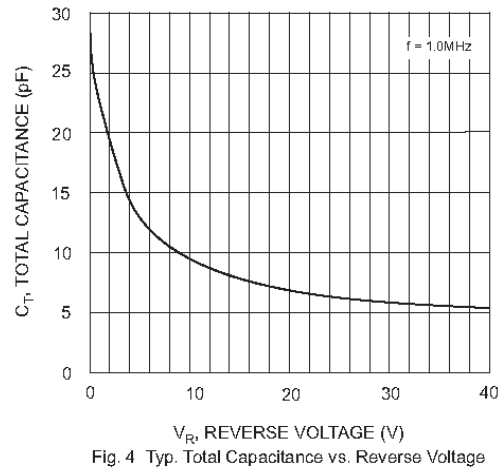
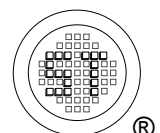


Fig. 4 Typ. Total Capacitance vs. Reverse Voltage

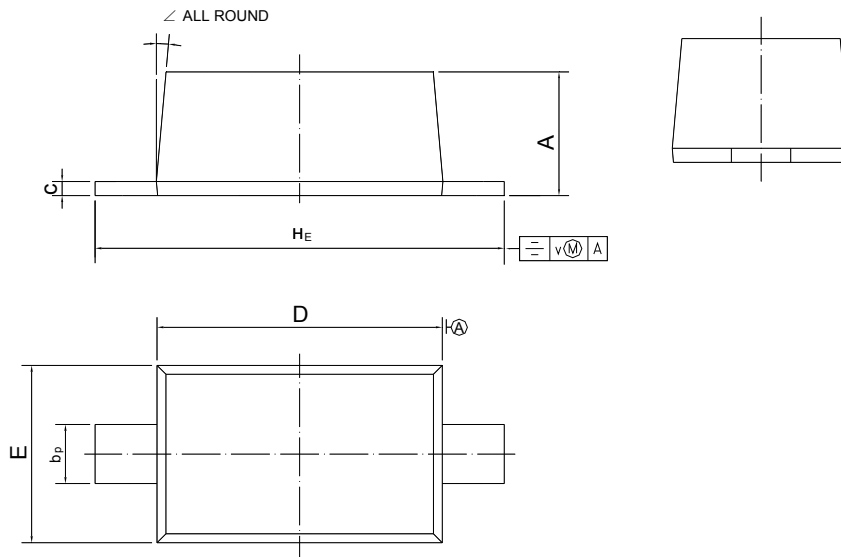


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PACKAGE OUTLINE

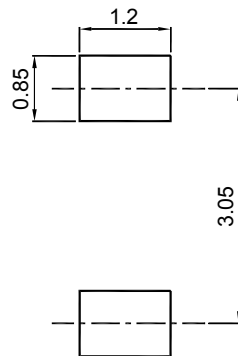
Plastic surface mounted package; 2 leads

SOD-123



UNIT	A	b_p	c	D	E	H_E	v	\angle
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°

Recommended Soldering Footprint



Packing information

Package	Tape Width (mm)	Pitch		Reel Size		Per Reel Packing Quantity
		mm	(inch)	mm	(inch)	
SOD-123	8	4 ± 0.1	0.157 ± 0.004	178	7	3,000

