

# SD101AWS...SD101CWS

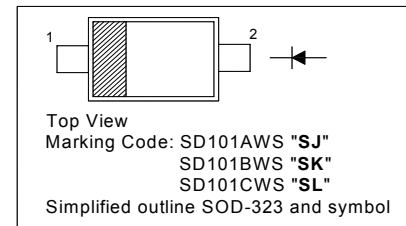
## SURFACE MOUNT SCHOTTKY BARRIER DIODE

### Features

- Low Forward Voltage

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

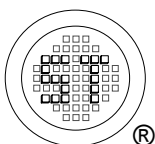


### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Peak Repetitive Reverse Voltage	SD101AWS	60	V
	SD101BWS	50	
	SD101CWS	40	
Reverse Voltage	SD101AWS	60	V
	SD101BWS	50	
	SD101CWS	40	
Forward Continuous Current	$I_{FM}$	15	mA
Power Dissipation	$P_{tot}$	200	mW
Non-Repetitive Peak Forward Surge Current at $t \leq 1\text{ s}$ at $t = 10\text{ }\mu\text{s}$	$I_{FSM}$	50	mA
		2	A
Operating Temperature Range	$T_j$	- 65 to + 125	$^\circ\text{C}$
Storage Temperature Range	$T_s$	- 65 to + 125	$^\circ\text{C}$

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

Parameter	Symbol	Min.	Max.	Unit	
Reverse Breakdown Voltage at $I_R = 10\text{ }\mu\text{A}$	$V_{(BR)R}$	SD101AWS	60	-	V
		SD101BWS	50	-	
		SD101CWS	40	-	
Forward Voltage at $I_F = 1\text{ mA}$  at $I_F = 15\text{ mA}$	$V_F$	SD101AWS	-	0.41	V
		SD101BWS	-	0.4	
		SD101CWS	-	0.39	
		SD101AWS	-	1	
		SD101BWS	-	0.95	
		SD101CWS	-	0.9	
Reverse Current at $V_R = 50\text{ V}$ at $V_R = 40\text{ V}$ at $V_R = 30\text{ V}$	$I_R$	SD101AWS	-	200	nA
		SD101BWS	-	200	
		SD101CWS	-	200	
Total Capacitance at $V_R = 0\text{ V}$ , $f = 1\text{ MHz}$	$C_T$	SD101AWS	-	2	pF
		SD101BWS	-	2.1	
		SD101CWS	-	2.2	
Reverse Recovery Time at $I_F = I_R = 5\text{ mA}$ , $I_{tr} = 0.1X I_R$ , $R_L = 100\text{ }\Omega$	$t_{rr}$	-	1	ns	



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 ISO 9001:2000 Certificate No. 0506098

Dated : 01/09/2006

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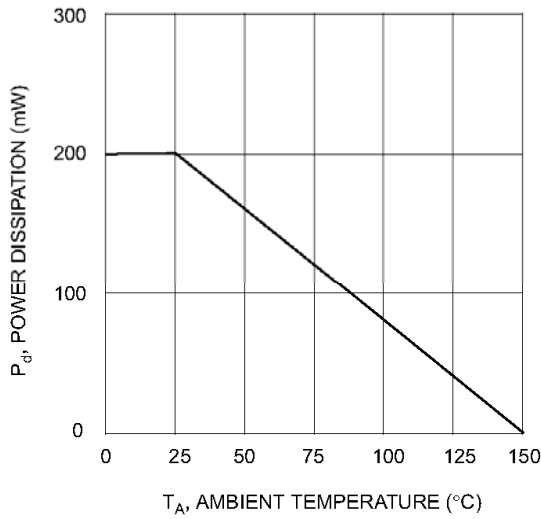


Fig. 1 Power Derating Curve

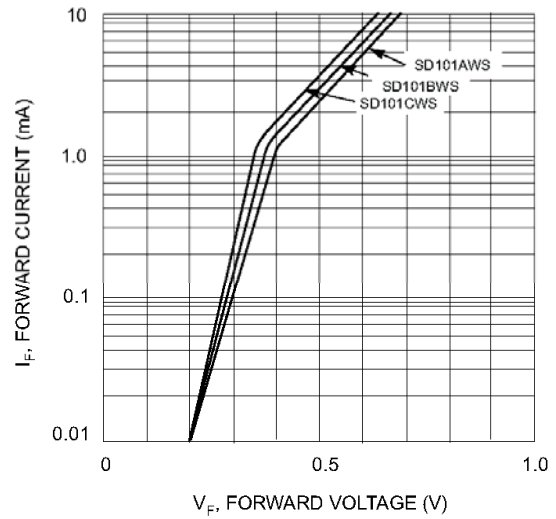


Fig. 2 Typical Forward Characteristics

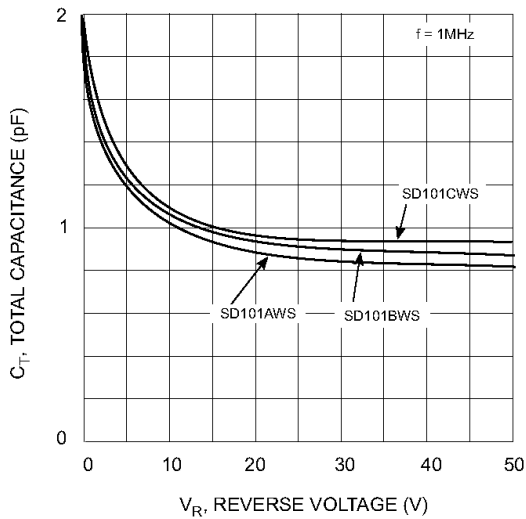
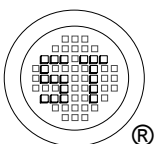


Fig. 3 Total Capacitance vs Reverse Voltage



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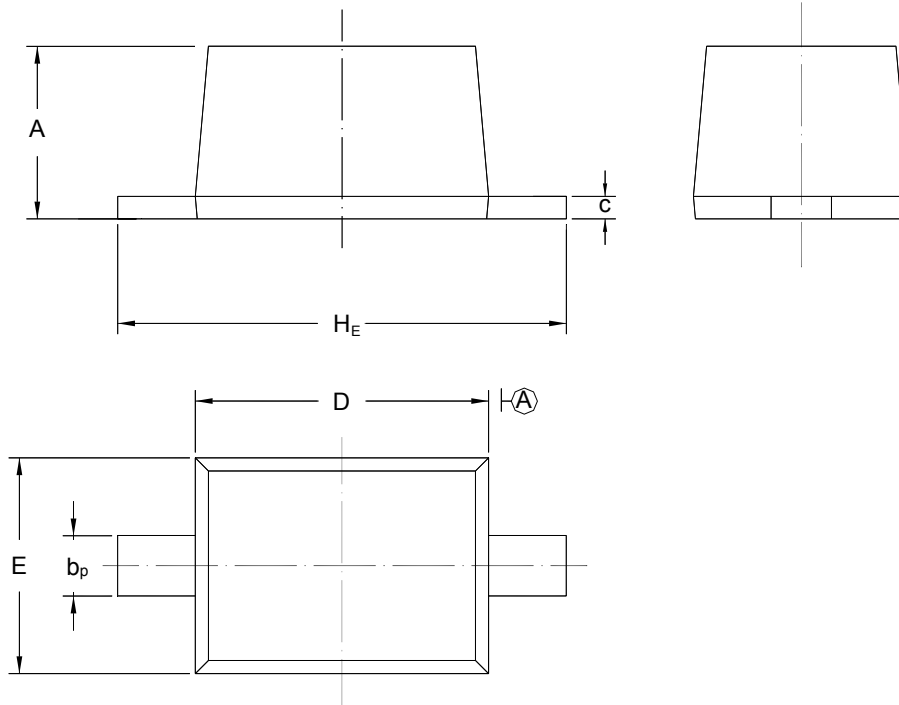
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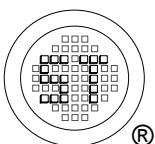
## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323



UNIT	A	b <sub>p</sub>	C	D	E	H <sub>E</sub>
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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