

SD101AWS...SD101CWS

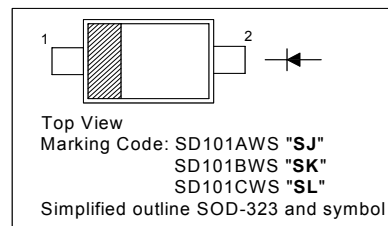
SURFACE MOUNT SCHOTTKY BARRIER DIODE

Features

- Low Forward Voltage

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

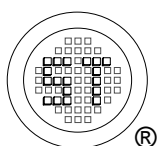


Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

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	



SEMTECH ELECTRONICS LTD.

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002 Certificate No. 05103
 ISO 14001:2004 Certificate No. 7116
 ISO 9001:2000 Certificate No. 0506098

Dated : 01/09/2006

SD101AWS...SD101CWS

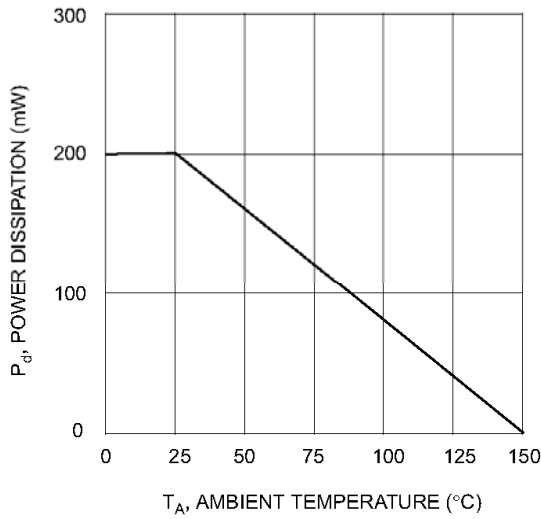


Fig. 1 Power Derating Curve

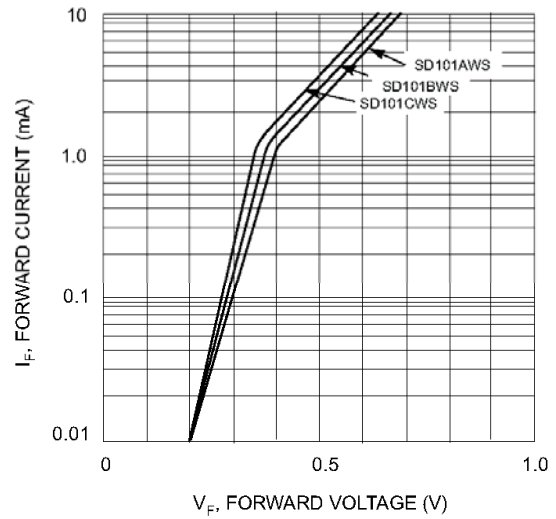


Fig. 2 Typical Forward Characteristics

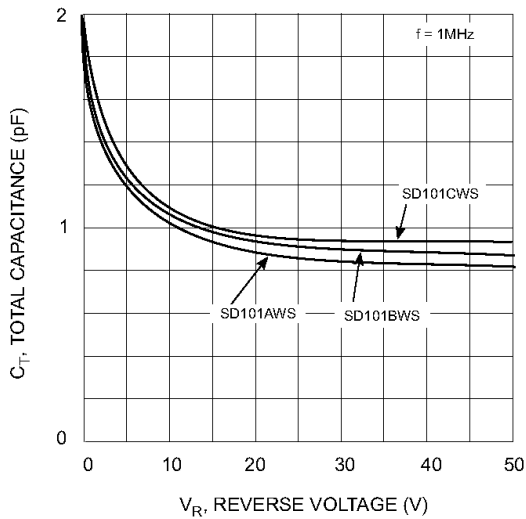
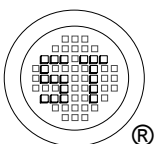


Fig. 3 Total Capacitance vs Reverse Voltage



SEMTECH ELECTRONICS LTD.
 (Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



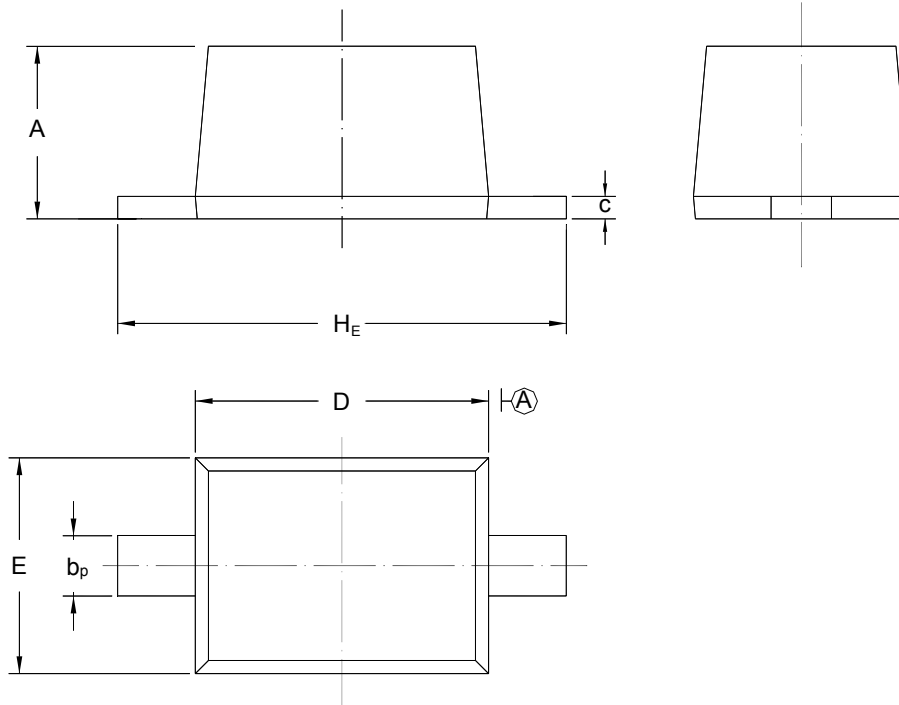
Dated : 01/09/2006

SD101AWS...SD101CWS

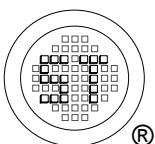
PACKAGE OUTLINE

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



SEMTECH ELECTRONICS LTD.
 (Subsidiary of Sino-Tech International Holdings Limited, a company
 listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002 Certificate No. 05103
 ISO 14001:2004 Certificate No. 7116
 ISO 9001:2000 Certificate No. 0506098

Dated : 01/09/2006