

# SD103AWS...SD103CWS-AH

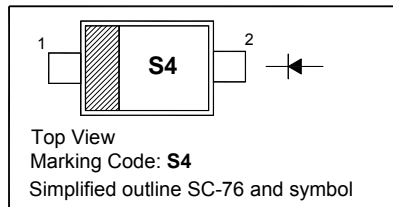
## Surface Mount Schottky Barrier Diodes

### Features

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

### PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode

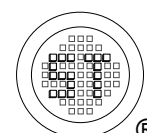


### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit	
Peak Repetitive Reverse Voltage	$V_{RRM}$	SD103AWS SD103BWS SD103CWS	40 30 20	V
Reverse Voltage		SD103AWS SD103BWS SD103CWS	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	$P_{tot}$	200	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 $I_R = 10\text{ }\mu\text{A}$	$V_{(BR)R}$	SD103AWS SD103BWS SD103CWS	40 30 20	- - -	V	
Reverse Leakage Current at $V_R = 30\text{ V}$ at $V_R = 20\text{ V}$ at $V_R = 10\text{ V}$		$I_R$	SD103AWS SD103BWS SD103CWS	- - -	5 5 5	$\mu\text{A}$
Forward Voltage at $I_F = 20\text{ mA}$ at $I_F = 200\text{ mA}$			$V_F$	- -	- -	0.37 0.6
Total Capacitance at $V_R = 0\text{ V}$ , $f = 1\text{ MHz}$	$C_T$			-	50	-
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	



# SD103AWS...SD103CWS-AH

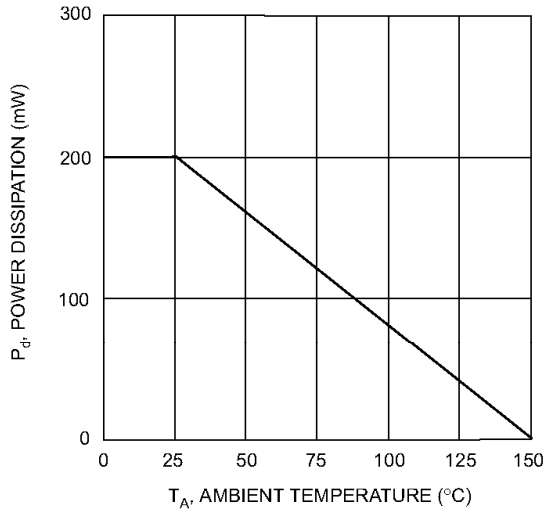


Fig. 1 Power Derating Curve

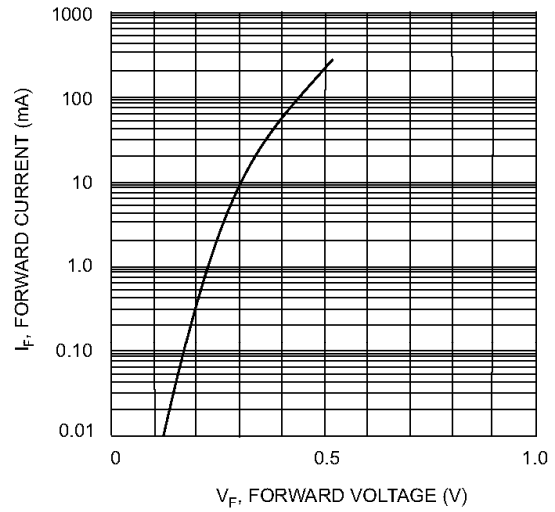


Fig. 2 Typical Forward Characteristics

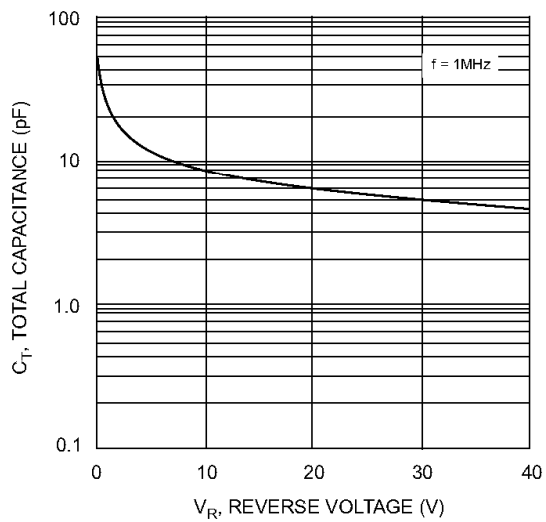
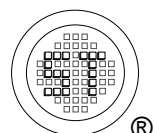


Fig. 3 Total Capacitance vs Reverse Voltage

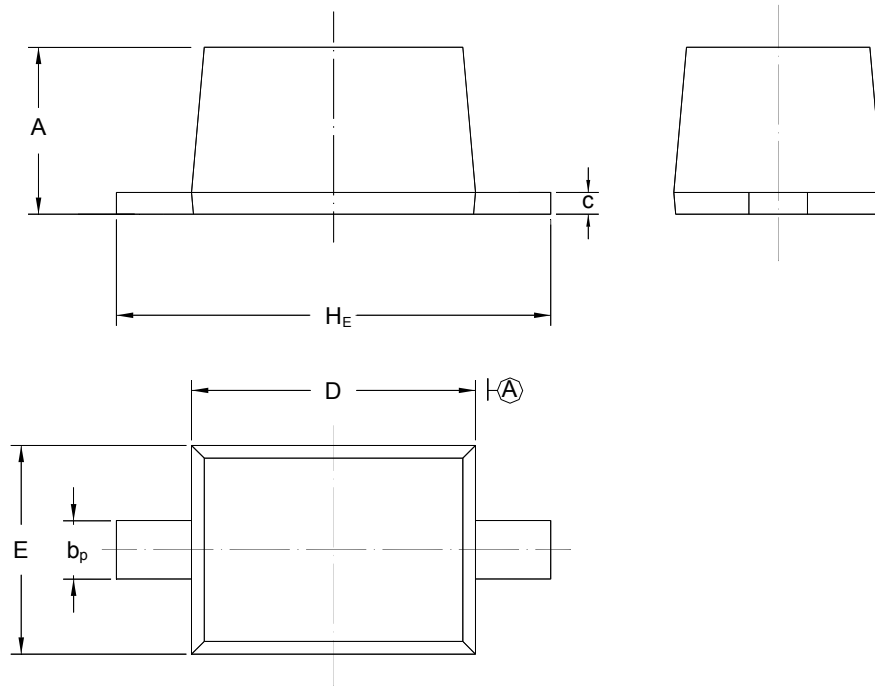


# SD103AWS...SD103CWS-AH

## PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SC-76



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

