

SD103AWS thru SD103CWS

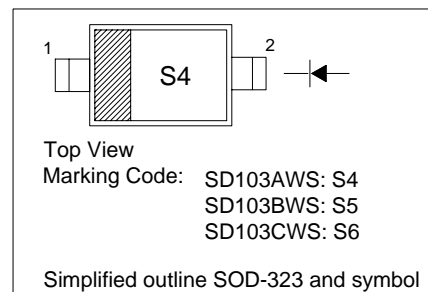
SCHOTTKY DIODE

Features

- For general purpose applications
- The SD103 series is a metal-on-silicon Schottky barrier device which is protected by a PN junction guard ring.
- The low forward voltage drop and fast switching make it ideal for protection of MOS devices, steering, biasing, and coupling diodes for fast switching and low logic level applications.

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Mechanical Data

Case: SOD-323 plastic case

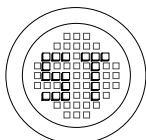
Absolute Maximum Ratings (T_j = 25°)

Parameter	Symbol	Value	Unit
Peak Reverse Voltage	V _{RRM}	SD103AWS 40	V
		SD103BWS 30	
		SD103CWS 20	
Maximum Single Cycle Surge 10μs Square Wave	I _{FSM}	2	A
Power Dissipation	P _{tot}	150 ⁽¹⁾	mW
Junction Temperature	T _J	125 ⁽¹⁾	°C
Storage Temperature Range	T _s	-55 to +150 ⁽¹⁾	°C
Thermal Resistance Junction to Ambient Air	R _{θJA}	650 ⁽¹⁾	°C/W

Note: (1) Valid provided that electrodes are kept at ambient temperature.

Characteristics at T_j = 25°

Parameter	Test Conditions	Symbol	Min	Typ	Max	Unit
Leakage Current	SD103AWS V _R = 30V	I _R	-	-	5	μA
	SD103BWS V _R = 20V				5	
	SD103CWS V _R = 10V				5	
Forward Voltage Drop	I _F = 20mA	V _F	-	-	0.37	V
	I _F = 200mA				0.6	
Junction Capacitance	V _R = 0V f = 1MHz	C _{tot}	-	50	-	pF
Reverse Recovery Time	I _F = I _R = 50mA to 200mA recover to 0.1	t _{rr}	-	10	-	ns



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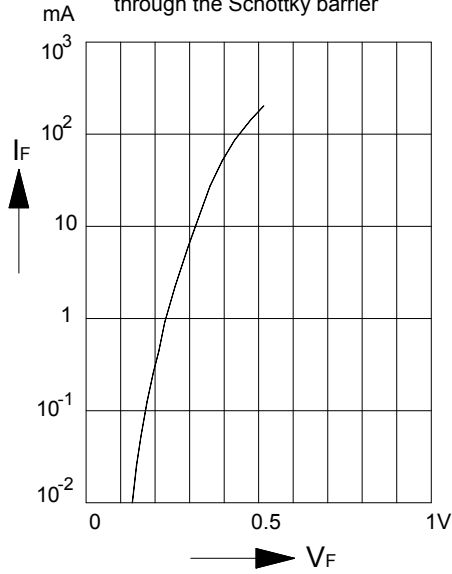
РАДИОТЕХ

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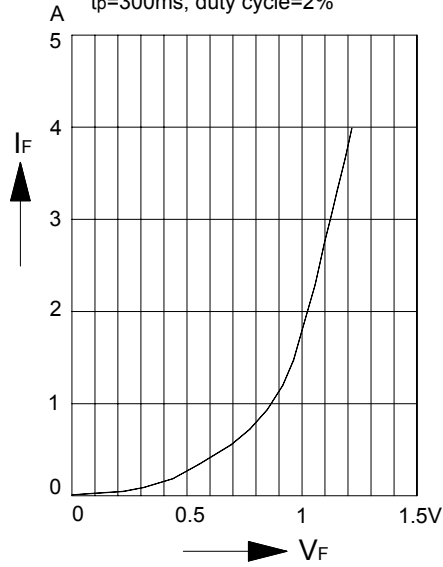
SD103AWS thru SD103CWS

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)

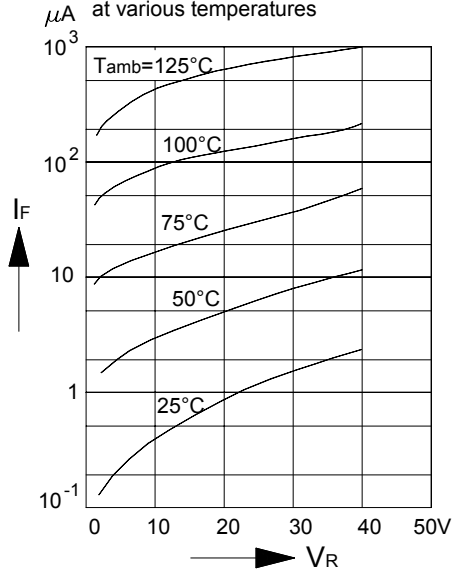
Typical variation of fwd. current vs. fwd. voltage for primary conduction through the Schottky barrier



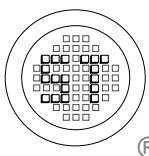
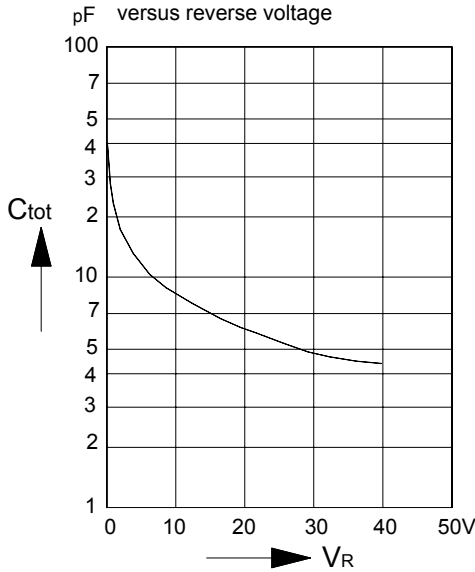
Typical high current forward conduction curve $t_p=300\text{ms}$, duty cycle=2%



Typical variation of reverse current at various temperatures

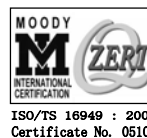


Typical capacitance versus reverse voltage



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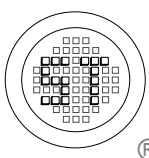
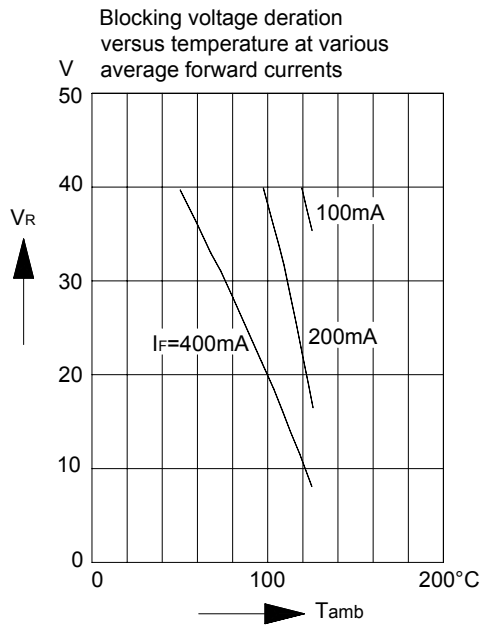


ISO 9001 : 2000
Certificate No. 829-100-01-002-001

Dated : 30/08/2004

SD103AWS thru SD103CWS

Ratings and Characteristic Curves ($T_A=25^\circ\text{C}$ unless otherwise noted)



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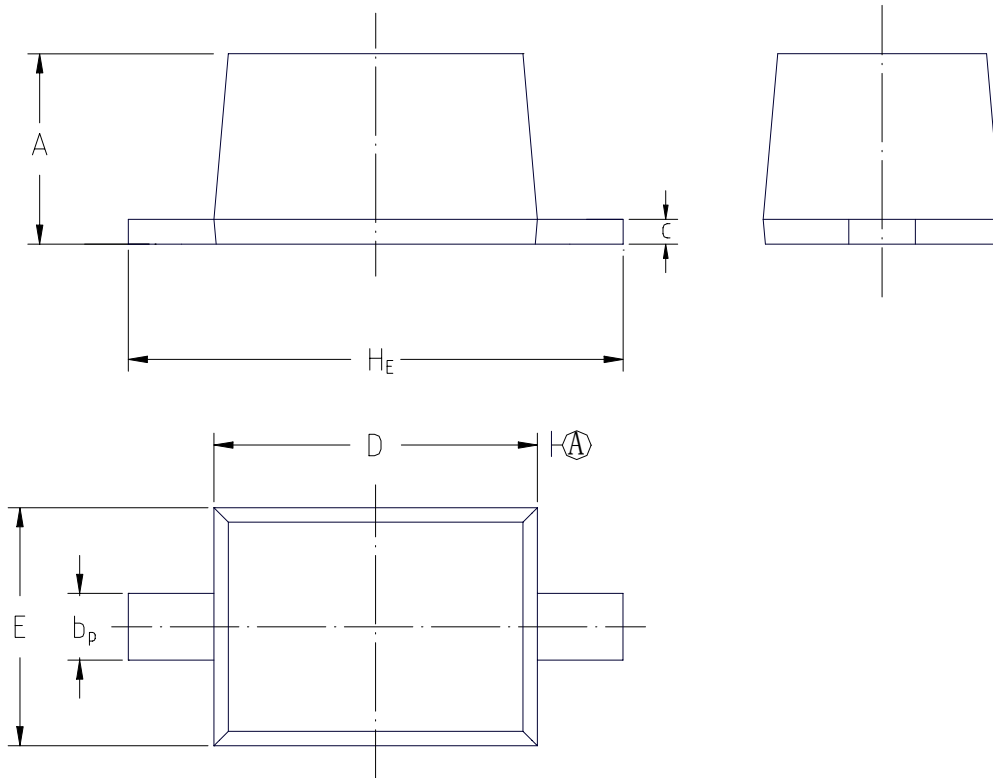
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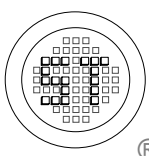
PACKAGE OUTLINE

Plastic surface mounted package; 2 leads

SOD-323

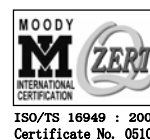


UNIT	A	b_p	c	D	E	H_E
mm	1.10 0.80	0.40 0.25	0.15 0.00	1.80 1.60	1.35 1.15	2.80 2.30



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