

SD103AWS/BWS/CWS

Rev.1 Dec.-2023

/ Descriptions

SOD-323

Schottky Diode in a SOD-323 Plastic Package.

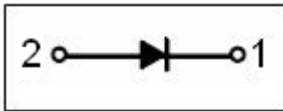
/ Features

Low positive pressure drop, can ignore the reverse recovery time, HF Product.

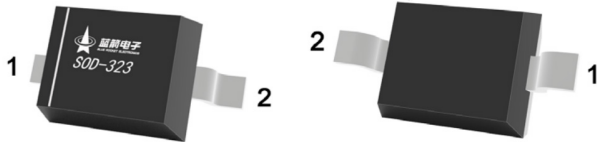
/ Applications

General purpose.

/ Equivalent Circuit



/ Pinning



PIN1:Cathode

PIN2:Anode

/ Marking

Model	SD103AWS	SD103BWS	SD103CWS
Marking	HS4	HS5	HS6

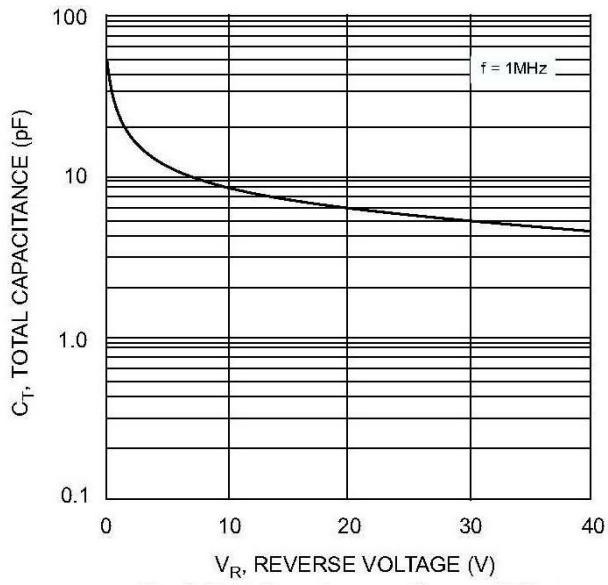
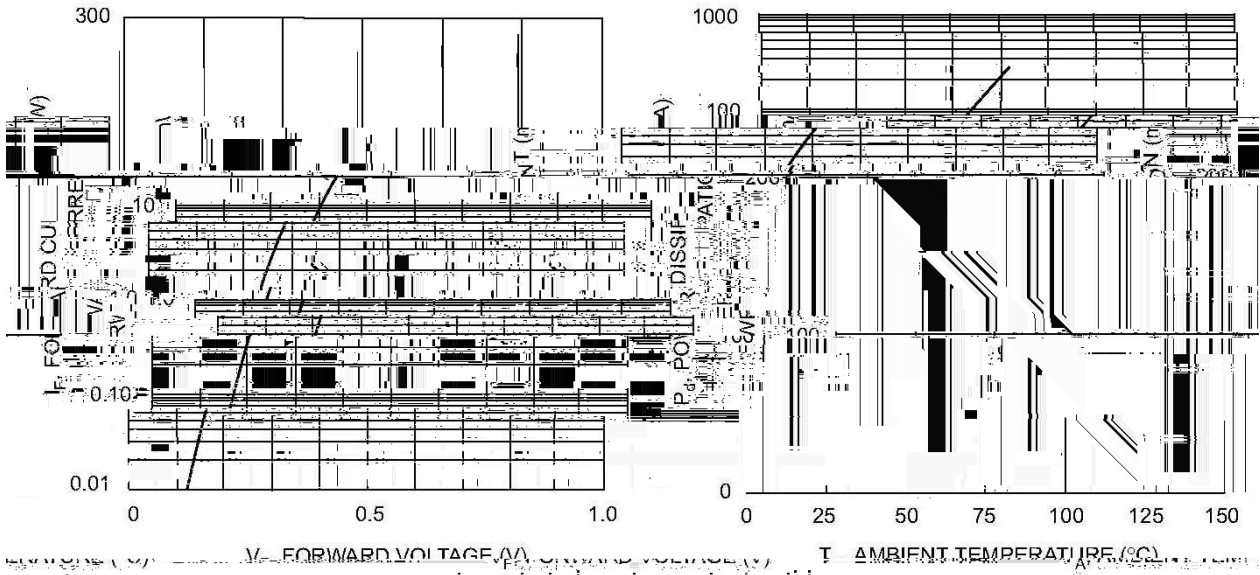
/ Absolute Maximum Ratings(Ta=25)

Parameter	Symbol	Rating			Unit
		SD103AWS	SD103BWS	SD103CWS	
Peak Repetitive Reverse Voltage , Working Peak Reverse Voltage DC Reverse Voltage	V_{RRM} V_{RWM} V_R	40	30	20	V
RMS Reverse Voltage	$V_{R_{RMS}}$	28	21	14	V
Non-Repetitive Peak Forward Current	I_{FM}	350			mA
Non-Repetitive Peak Forward Surge Current	I_{FSM}	1.5			A
Power Dissipation	P_D	200			mW
Typical Thermal Resistance Junction to Ambient	R_{JA}	625			/W
Junction and Storage Temperature Range	T_J, T_{stg}	-65 125			

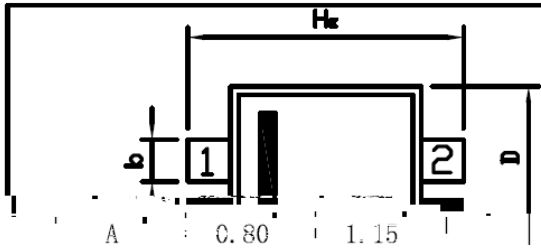
/ Electrical Characteristics(Ta=25)

Parameter	Symbol	Test Conditions	Rating			Unit
			Min	Typ	Max	
Reverse Breakdown Voltage	$V_{(BR)}$	$I_R=10\mu A$	V_R			V
Forward Voltage Drop	V_{FM}	$I_F=20mA$			0.37	V
		$I_F=200mA$			0.6	
Instantaneous Reverse Current	SD103AWS	$V_R=30V$			5.0	uA
	SD103BWS	$V_R=20V$				
	SD103CWS	$V_R=10V$				
Reverse Recovery Time	t_{rr}	$I_F=I_R=200mA$ $I_{rr}=0.1 \times I_R$ $R_L=100$		10		ns
Total Capacitance	C_T	$V_R=0V$ $f=1.0MHZ$		50		pF

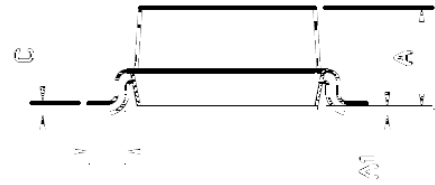
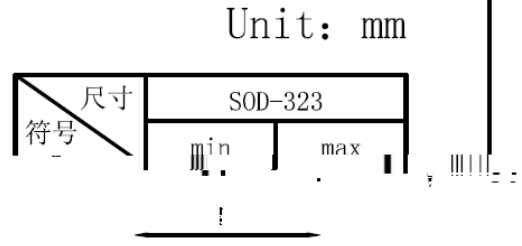
/ Electrical Characteristic Curve



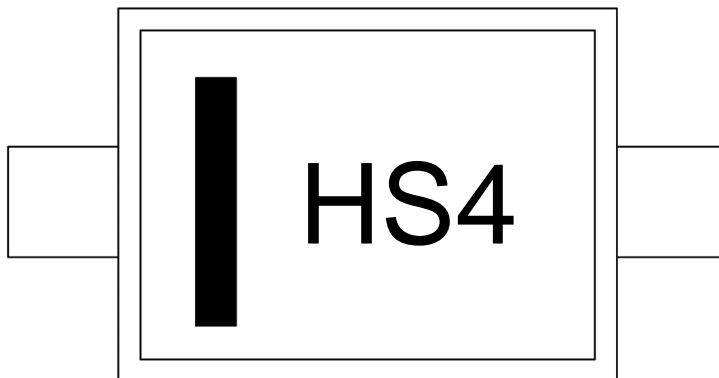
/ Package Dimensions



A	0.80	1.15
AI	0.60	0.20
b	0.25	0.40
C	0.68	0.18
D	1.20	1.40
E	1.40	1.80
HE	2.50	2.80
L	0.20	0.45



/ Marking Instructions



H

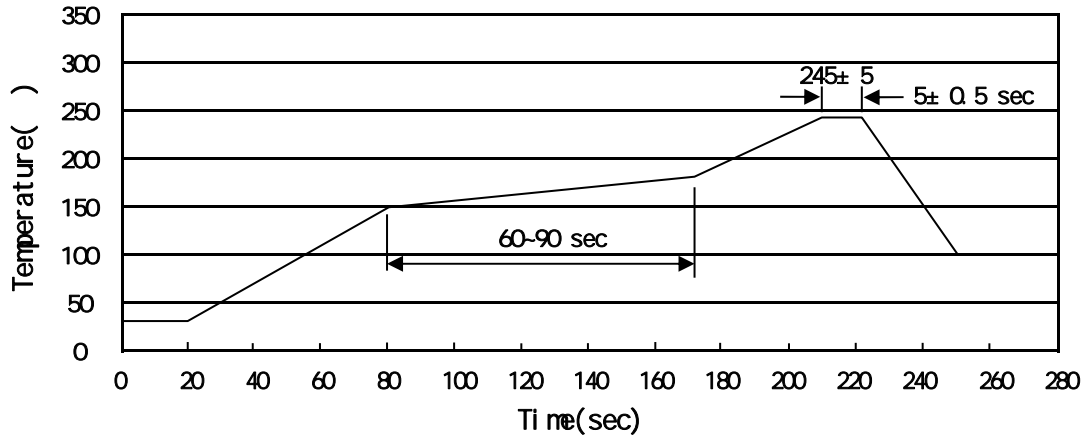
S4

Note:

H: Company Code

S4: Product Type Code

() / Temperature Profile for IR Reflow Soldering(Pb-Free)



Note:

- | | | | | | |
|---|-------|-----|-------|----------|---|
| 1 | 150 | 180 | 60 | 90sec; | 1.Preheating:150~180 , Time:60~90sec. |
| 2 | 245±5 | | 5±0.5 | sec; | 2.Peak Temp.:245±5 , Duration:5±0.5sec. |
| 3 | | | 2 | 10 /sec. | 3. Cooling Speed: 2~10 /sec. |

/ Resistance to Soldering Heat Test Conditions

260±5 10±1 sec. Temp.:260±5 Time:10±1 sec

/ Packaging SPEC.

/ REEL

Package Type	Units					Dimension (unit mm ³)		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOD-323	3,000	10	30,000	6	180,000	7 x8	180x120x180	390x385x205

/ Notices