

# SD103AW/BW/CW

Rev.F Apr.-2018

## / Descriptions

SOD-123

Schottky Diode in a SOD-123 Plastic Package.

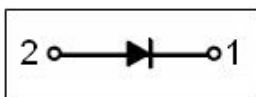
## / Features

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

## / Applications

Schottky diode.

## / Equivalent Circuit



## / Pinning



PIN1:Cathode

PIN2:Anode

## / h<sub>FE</sub> Classifications & Marking

Model	SD103AW	SD103BW	SD103CW
Marking	HS4	HS5	HS6

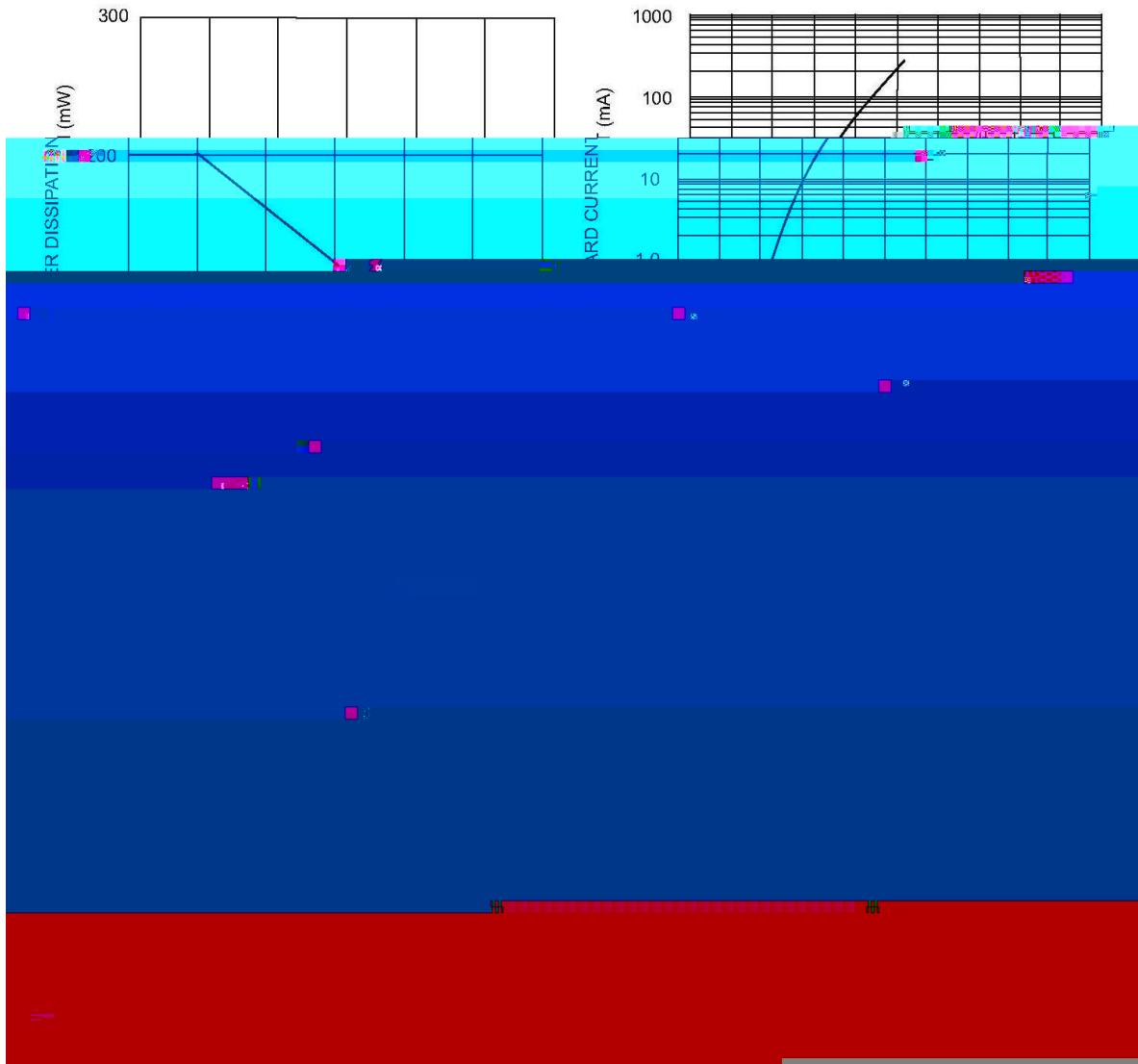
## / Absolute Maximum Ratings(Ta=25 )

Parameter	Symbol	Rating			Unit
		SD103AW	SD103BW	SD103CW	
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Reverse Voltage	$V_R$ $V_{RRM}$ $V_{RWM}$	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	$P_D$	400			mW
Typical Thermal Resistance Junction to Ambient	$R_{\theta JA}$	300			/W
Junction and Storage Temperature Range	$T_j, T_{STG}$	-65 125			

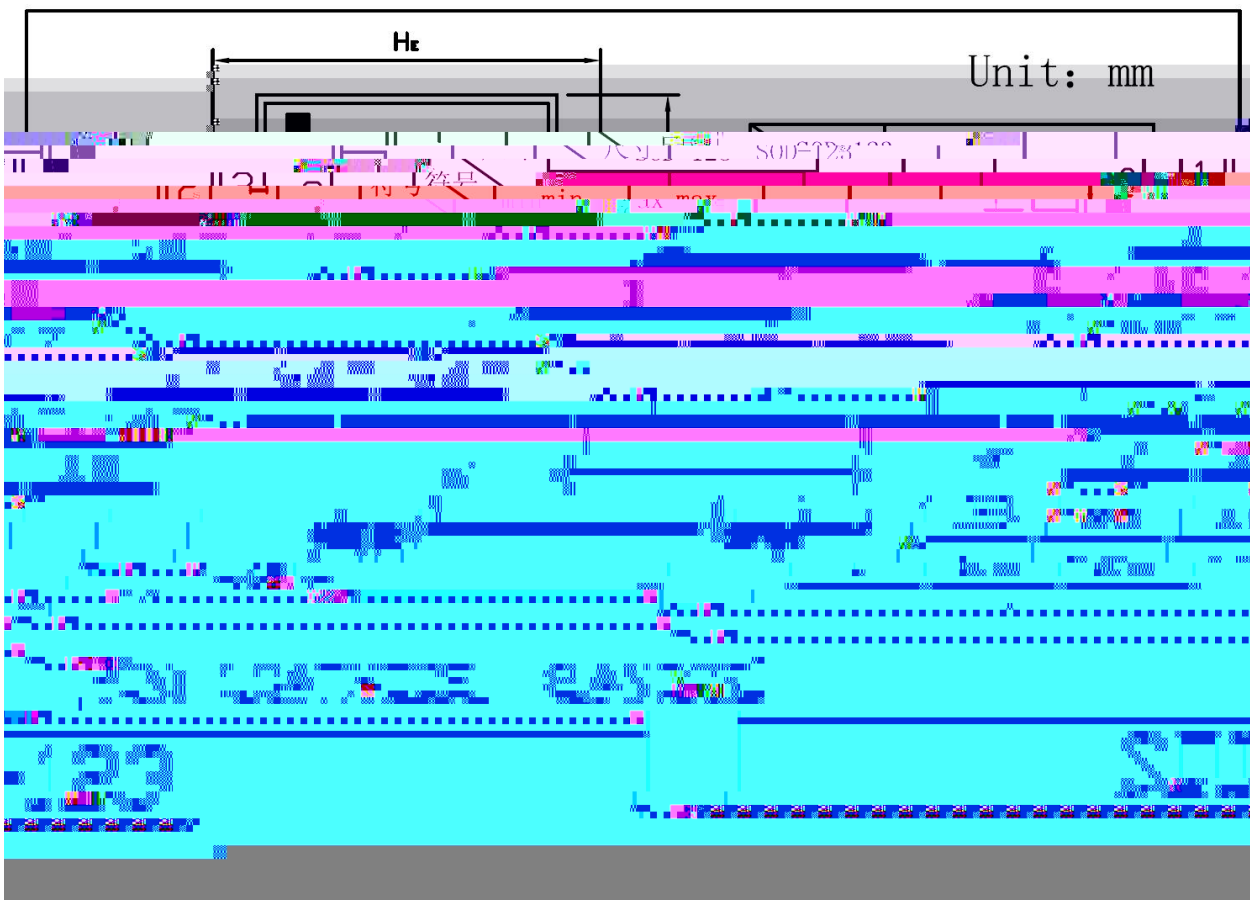
## / Electrical Characteristics(Ta=25 )

Parameter	Symbol	Test Conditions	Min	Typ	Max	Unit
Forward Breakdown Voltage	$V_{(BR)R}$	$I_R=100\mu A$	VR			V
Peak Forward Voltage	$V_{FM}$	$I_F=20mA$			0.37	
		$I_F=200mA$			0.6	
Peak Reverse Current	SD103AW	$I_{RM}$	$V_R=30V$		5	$\mu A$
	SD103BW		$V_R=20V$			
	SD103CW		$V_R=10V$			
Total Capacitance	$C_T$	$V_R=0V$ $f=1.0MHZ$		28		pF
Resistance Range Time	$t_{rr}$	$I_F=I_R=200mA$ $I_{rr}=0.1 \times I_R$ $R_L=100\Omega$		10		ns

/ Electrical Characteristic Curve



/ Package Dimensions



/ Marking Instructions



H

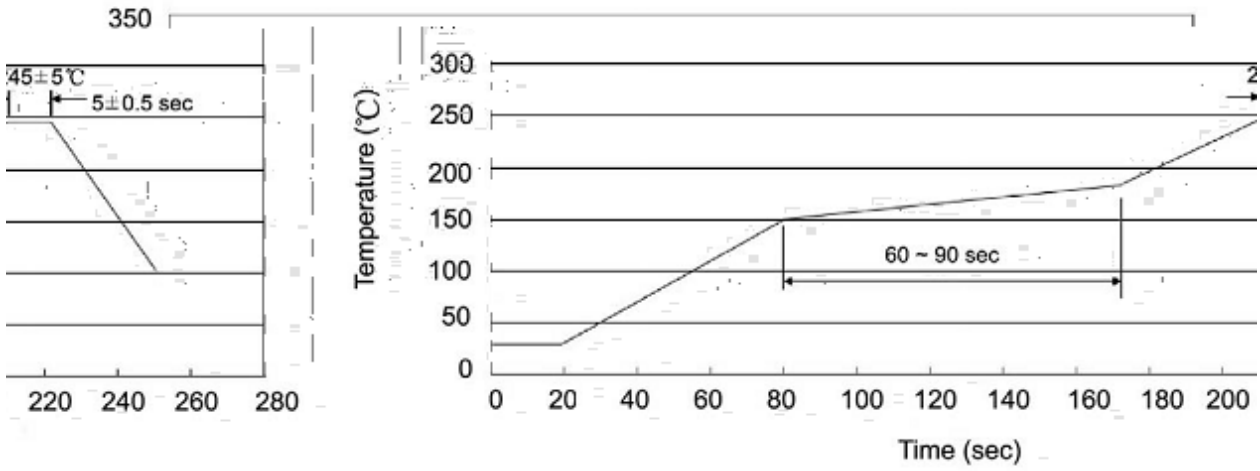
S5

Note:

H: Company Code.

S5: Product Type.

( ) / 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±0.5sec; |        | 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 <sup>3</sup> )		
	Units/Reel	Reels/Inner Box	Units/Inner Box	Inner Boxes/Outer Box	Units/Outer Box	Reel	Inner Box	Outer Box
SOD-123	3,000	10	30,000	6	180,000	7 ×8	180×120×180	390×385×205

/ Notices