

SD103AW/BW/CW

Rev.F Apr.-2018

/ Descriptions

SOD-123

Schottky Diode in a SOD-123 Plastic Package.

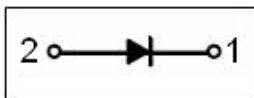
/ Features

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

/ Applications

Schottky diode.

/ Equivalent Circuit



/ Pinning



PIN1:Cathode

PIN2:Anode

/ h_{FE} Classifications & Marking

Model	SD103AW	SD103BW	SD103CW
Marking	HS4	HS5	HS6

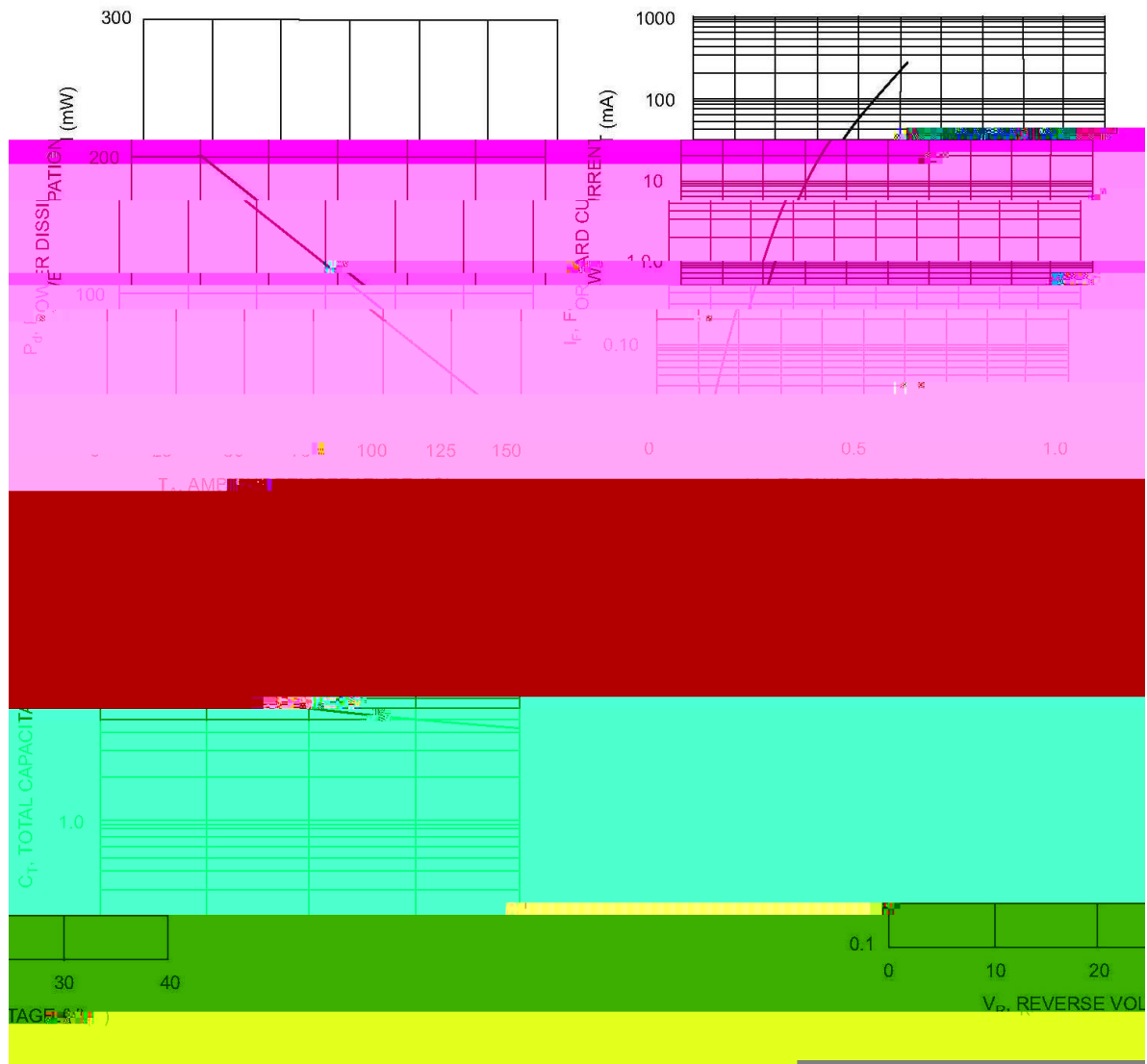
/ Absolute Maximum Ratings(Ta=25)

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			

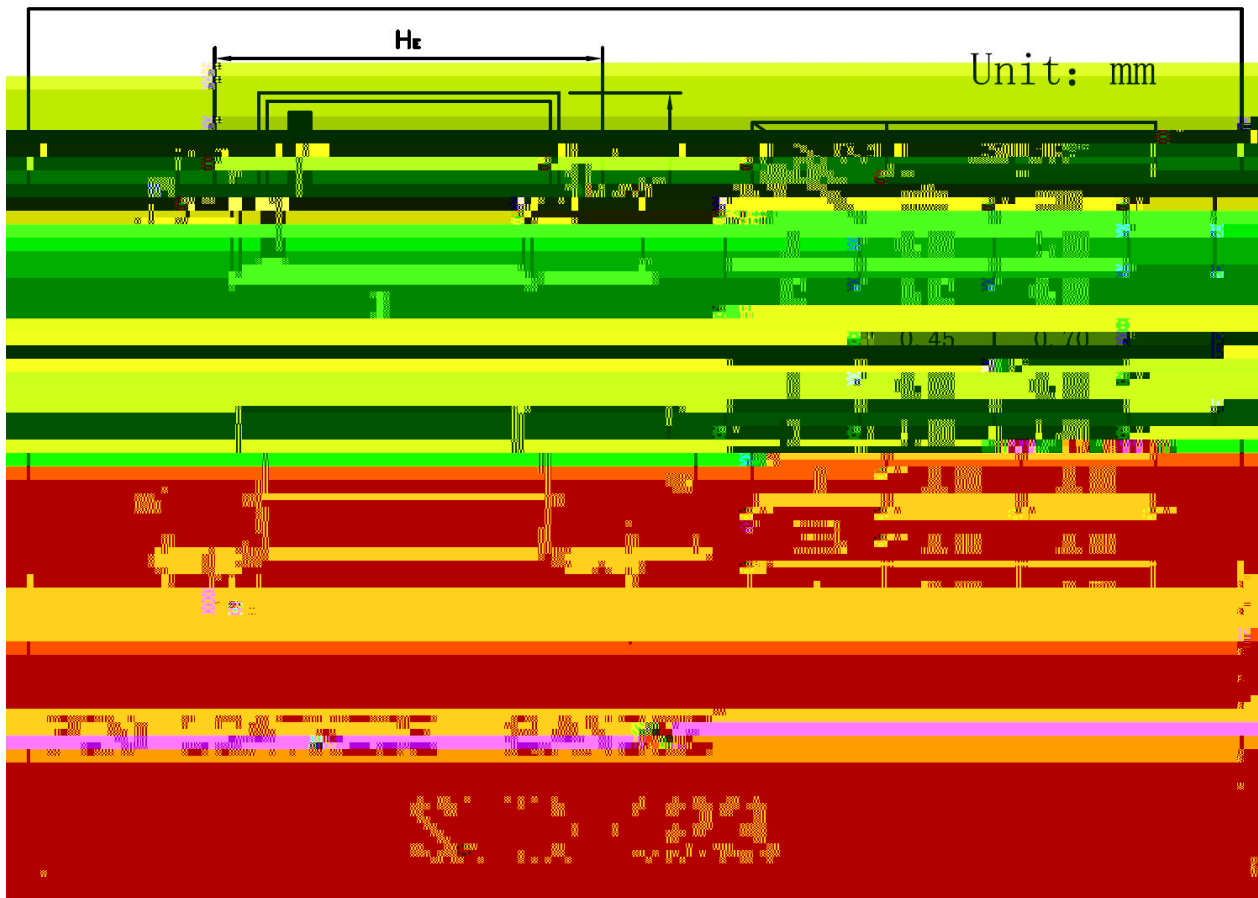
/ Electrical Characteristics(Ta=25)

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	μA
	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

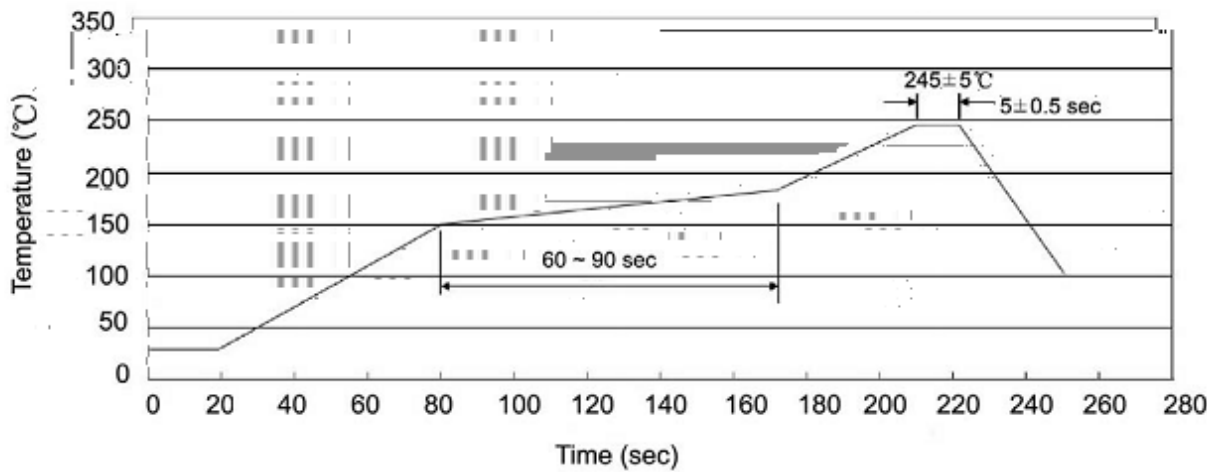
S5

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 ³)		
	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**